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Factors Associated With Quality of Life Among Colorectal Cancer Patients: Cross-Sectional Study

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Abstract

Introduction: Colorectal cancer is a chronic condition that affects a substantial proportion of the global population. Ensuring a satisfactory quality of life (QoL) for these patients is, therefore, of critical importance.

Objective: To examine the relationship between sociodemographic, economic, lifestyle, and health-related variables and quality of life in patients with colorectal cancer receiving treatment at a leading health institution in Medellín, Colombia.

Methods: This cross-sectional study included all patients aged 18 years and older who were diagnosed with colorectal cancer and treated at the VIDA Clinic Foundation in 2022. Descriptive and bivariate analyses were conducted to characterize the population and explore factors associated with QoL, as assessed using the Functional Assessment of Cancer Therapy-Colorectal (FACT-C) scale. The Mann-Whitney U and Kruskal-Wallis tests were applied to compare median values across variables. A Generalized Linear Model (GLM) with a Gamma family distribution and identity link function was used to identify explanatory variables influencing QoL. Regression coefficients and 95% confidence intervals were calculated.

Results: A total of 126 patients with colorectal cancer were evaluated, of whom 60.3% were women, with a median age of 61.5 years. The regression model identified poor sleep quality, lack of financial support, dissatisfaction with income, and unemployment as significant factors negatively associated with QoL, after adjusting for sociodemographic variables.

Conclusion: This study provides an initial exploration of health-related QoL in a Colombian population diagnosed with colorectal cancer. The findings highlight the critical influence of both health-related and socioeconomic factors on patients' QoL. A holistic approach to addressing these dimensions could enhance patient care and inform more effective support strategies.

Keywords

colorectal neoplasms, quality of life, FACT-C, health

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Introduction

Colorectal cancer (CRC) is the most common malignancy of the digestive tract, with a rising incidence among younger adults.[1] It ranks as the third leading cause of cancer worldwide, accounting for 9-10% of all cancer cases, and is responsible an estimated 916,000 deaths in 2020.[1] In 2023, colorectal cancer ranks third in both incidence and mortality in Colombia, accounting for 11.70% cases (n = 33,215).[2] As late diagnosis or inadequate treatment significantly reduces survival rates.[3,4] However, many risk factors for CRC are modifiable. These include smoking, an unhealthy diet, alcohol consumption, physical inactivity, and obesity.[1,4,5] Additionally, with timely detection and removal of precancerous lesions, CRC can often be prevented or controlled, and over 60% of patients may survive if the disease is detected early, before metastasis occurs.[6]

Colorectal cancer requires a complex approach, as the diagnosis affects personal, occupational, social, and family aspects, all of which impact the patient's health and environment.[7,8] Consequently, the health-related quality of life (HRQoL) in populations with these diagnoses is significantly affected.[9,10] Assessing and addressing HRQoL is crucial not only for supporting patient recovery but also for reducing healthcare costs.[11] The HRQoL refers to the perception of a person diagnosed with colorectal cancer regarding their physical, emotional, social, and functional well-being, all of which are influenced by the disease and its treatment.[12,13]

Several authors have explored the factors associated with quality of life, including self-efficacy (individual), social support (environment), pain and fatigue (symptoms), and functional status.[14] However, the emotional component and cancer-specific conditions have gained importance in recent years, and several scales, such as the Functional Assessment of Cancer Therapy-Colorectal (FACT-C), now include dimensions specifically tailored to the disease.[15] Although global research has examined HRQoL in patients with colorectal cancer, it remains ambiguous in the local context,[16,17] even though it is widely acknowledged that living with colorectal cancer has profound implications for daily life.[17] Recognizing this reality is essential for the success of therapeutic interventions.

In alignment with these ideas, the recovery of colorectal cancer patients extends beyond the mere absence of clinical symptoms to include the restoration of normal functioning and the pursuit of a meaningful life.[14] This highlights the need for a multidimensional approach that prioritizes improvements in functional outcomes while placing the patient's subjective experience at the forefront.[17] Despite the recognized importance of HRQoL in colorectal cancer treatment, current interventions remain focused on symptom management and crisis prevention, primarily through pharmacotherapy, chemotherapy, or radiotherapy. As a result, healthcare programs often overlook efforts to enhance quality of life and patient satisfaction. This neglect poses challenges, as symptom relief alone does not guarantee improved HRQoL, and declines in functionality often persist due to comorbidities, chronic stressors, and insufficient social or family support.

Consequently, there is a pressing need to find effective methods to enhance both the short-term and long-term health-related quality-of-life (HRQOL) of CRC patients and survivors.[18] This is crucial not only as a key indicator of the care quality and overall well-being of individuals but also as a determinant of mortality since higher HRQOL has been associated with a lower risk of death and more successful recovery from cancer.[16,19] In effect, this study aims to examine how different sociodemographic, economic, lifestyle, and health variables influence HRQOL in patients diagnosed with colorectal cancer treated at a leading health institution in Medellín, Colombia. This is a preliminary step toward future interventions to improve the patient's quality-of-life.

Methods

Design and participants

A cross-sectional study was conducted. Participants were all patients aged 18 to 75 diagnosed with colorectal cancer, confirmed in ICD-10 with C18-C21 codes, who were treated at the VIDA Clinic Foundation in Colombia during 2022. In effect, study used the census. Participants had no concomitant diseases that impaired decision-making abilities. The reporting of this study conforms to STROBE guidelines[20] (Supplement 1).

Instruments

The study's primary outcome was quality of life, assessed using the international Functional Assessment of Cancer Therapy – Colorectal (FACT-C) survey, which is approved for use in Spanish.[15,21] The FACT-C survey has demonstrated good internal consistency, reliability, and concurrent validity, and it effectively distinguishes between groups based on functional status and disease severity. It can be administered through self-assessment or interviews, depending on the participant's circumstances.[15,22]

This survey consists of 36 items, covering subscales for Physical, Social/Family, Emotional, Functional, and Colorectal Cancer-specific domains, reflecting the experiences of the previous seven days. Responses are rated on a 5-point Likert scale (0 = not at all, 1 = a little, 2 = somewhat, 3 = quite a lot, 4 = a lot). For FACT scales, negatively worded items are reverse-scored (subtracting the response value from 4), and subscale scores are derived by summing the raw (0-4) scores. A total score is calculated by summing the subscale scores, with the total ranging from 0 to 136.[15,22] Additionally, FACT-C total and dimension scores were standardized on a 0-100 point scale for comparison purposes. A higher score on the FACT-C scale indicates better quality of life.

The study also collected demographic data, including sex (female, male), age, socioeconomic status (low, medium-high), education (primary [elementary], secondary [high school], tertiary [university, master's, or doctorate]), and occupation (employed, unemployed). In Colombia, socioeconomic status is determined by a stratification system that classifies residential properties to regulate public service provision. This system applies differential charges for public utilities based on property strata. For this study, two socioeconomic groups were defined: low (strata 1 and 2) and medium-high (strata 3 to 6). Age was categorized into adulthood (26 to 59 years) and old age (60 years and older) following guidelines from the World Health Organization (WHO) and the Colombian Ministry of Health.[23]

Health-related variables included meal frequency (1-2 times per day, more than 3 times per day) and the intake of ultra-processed foods—foods requiring minimal preparation, such as canned soups, instant noodles, canned pasta, or bread.[24] Other dietary factors considered were the consumption of fats (trans or saturated), fruits, vegetables, dairy products, and sausages. Additional variables included body mass index (BMI), self-medication practices, and the frequency of medical attention.

Lifestyle habits assessed included smoking (yes/no), alcohol consumption (yes/no), and regular physical exercise (yes/no), defined as engaging in at least three activities per week for a minimum of 30 minutes each. Sleep quality was measured using the Pittsburgh Sleep Quality Index.[25] Economic factors included financial support from family or friends (yes/no), satisfaction with income level (yes/no), and ability to afford medical expenses (yes/no).

Procedure

The health institution provided a list of patients diagnosed with colorectal cancer in 2022. Investigators reviewed the diagnostic criteria and selected individuals aged 18 years or older, resulting in 126 eligible records. Contact information was retrieved from clinical records, and patients were contacted via telephone to complete the survey. The phone interviews lasted approximately 15 minutes. The study was explained beforehand, and verbal informed consent was obtained from participants. Data collection occurred between January and February 2023.

Statistical Analysis

All analyses were performed using R Core Team (2021). Univariate analyses were conducted to calculate frequencies and proportions for qualitative variables and measures of central tendency for quantitative variables. The Mann-Whitney U and Kruskal-Wallis tests ($P < 0.05$) were used to evaluate the relationship between demographic, health, lifestyle, and economic variables and quality of life.

A Linear Regression Model was employed to explore the explanatory variables affecting changes in quality of life. The FACT-C total score was used as the outcome variable, with total and dimension scores standardized to a 0-100 point scale. Sociodemographic, health, lifestyle, and economic factors were included as explanatory variables, selected based on theoretical evidence and statistical associations.

The model was constructed using a Generalized Linear Model (GLM) with a Gamma family distribution and identity link function. This approach was chosen because the outcome variable is continuous, constrained between 0 and 100, and does not follow a normal distribution. The Gamma distribution is appropriate for continuous, positive data, and the identity link offers straightforward interpretation of the predictors' effects on the outcome. This modeling approach ensures an accurate representation of the data and provides clear insights into the relationship between sociodemographic and health-related factors and quality of life in colorectal cancer patients. The model was developed using a stepwise approach, guided by the Akaike Information Criterion (AIC) to select the best-fitting model.

Ethics

The study adhered to the ethical principles of the Declaration of Helsinki.[26] It was classified as minimal risk according to Colombian ethical resolution 8430 of 1993.[27] The study received ethical approval from the Ethics Committee on Research of the VIDA Clinic Foundation [in Spanish, Fundación Colombiana de Cancerología Clínica Vida], with code CEI-0190-03-2023, recorded in minute #122 on March 1, 2023, in Medellín, Colombia. Throughout the study, patient safety was prioritized, informed consent was obtained, and participant confidentiality was maintained.

Results

A total of 126 patients diagnosed with colorectal cancer at the VIDA Clinic Foundation, aged between 26 and 75 years with a median age of 61.5 years (IQR 54 - 66), were evaluated. Of these patients, 60.3% were female. The survey results provided data on sociodemographic, lifestyle, economic, and health variables (Table 1).

Regarding dietary habits, 82.5% of the patients consumed sausages, 57.1% consumed ultra-processed foods, and 31.0% consumed fats less than once a week. Conversely, 75.4% of the patients consumed fruits, 72.2% consumed vegetables, 77.0% consumed cereals, and 81.0% consumed dairy products more than four times a week (data not shown). Obesity or overweight was reported in 45.2% of patients. Regarding physical exercise, 61.9% (n = 78) of patients engaged in some form of exercise, with 52.5% (41/78) exercising three or more times a week and 47.4% (37/78) exercising at least three times a week. Among those who self-medicated (24.6%, n = 31),

Table 1. Distribution of Sociodemographic, Lifestyle, Economic, and Health Characteristics Among Colorectal Cancer Patients. VIDA Clinic, 2022.

Variable	n = 126	%
Sociodemographic		
Sex		
Male	50	39.7
Female	76	60.3
Age		
Old age	72	57.1
Adulthood	54	42.9
Socioeconomic stratum		
Medium-high	68	54.0
Low	58	46.0
Educational level		
Primary education-No education	46	36.5
Secondary education	38	30.2
Tertiary education	42	33.3
Occupation		
Employed	85	67.5
Not employed	41	32.5
Health		
How often do you receive medical attention		
More than 1 month	69	54.8
Every month/less than 1 month	57	45.2
Self-medication		
No	95	75.4
Yes	31	24.6
Number of meals per day		
1-2 times a day	11	8.7
More than 3 times a day	115	91.3
Body Mass index (BMI)		
Normal	61	48.4
Overweight	46	36.5
Obesity	11	8.7
Underweight	8	6.4
Lifestyle habits		
Smoking		
No	118	93.7
Yes	8	6.3
Alcohol consumption		
No	104	82.5
Yes	22	17.5
Sleep quality		
Good quality	57	45.2
Poor quality	69	54.8
Physical exercise		
Yes	78	61.9
No	48	38.1
Economic		
Has financial support from family or friends		
Yes	80	63.5
No	46	36.5
Satisfaction with income level		
Yes	64	50.8
No	62	49.2
Ability to cover medical expenses		
Yes	84	66.7
No	42	33.3

90.3% did so due to pain and 9.7% due to other discomforts (table 1).

An analysis of the responses from the FACT-C scale revealed a median total quality of life score of 76.1 (IQR: 67.6-83.1). Among the subscales, the physical well-being domain recorded the highest median score (85.7), whereas the social/family well-being domain exhibited the lowest median score (67.9) (Table 2).

The bivariate analysis identified statistically significant relationships between Body Mass Index (BMI), sleep quality, satisfaction with income level, and the ability to cover medical expenses ($P < 0.05$). Patients with obesity exhibited a median FACT-C score of 83.1, which was above the overall median. Furthermore, individuals reporting good sleep quality, financial support, satisfaction with income, and the ability to afford medication costs had median scores ranging from 77 to 79 points—notably higher than those without these favorable conditions (Table 3).

The multiple regression model identified key explanatory variables influencing quality of life. Economic factors and sleep quality emerged as significant predictors of changes in quality of life. Specifically, patients who were unemployed, lacked financial support or assistance from family or friends, and expressed dissatisfaction with their income showed significant reductions in their mean quality of life score. Additionally, individuals reporting poor sleep quality experienced a 12.33-point decrease in their average quality of life score. The model was adjusted for demographic variables and BMI (Table 4).

Discussion

In this study, we found a median quality of life score of 76.1 (IQR: 67.6-83.1), with the Social-Family Well-Being dimension showing the lowest median score (67.9). The regression model identified key factors explaining changes in quality of life, including poor sleep quality, lack of financial support, dissatisfaction with income, and unemployment, even after adjusting for sociodemographic variables.

Health-related quality of life (HRQoL) is a multidimensional concept encompassing physical, functional, cognitive, emotional, and social aspects of well-being.[28] Functionality is

Table 2. Results of Fact-C Domains (n = 126). VIDA Clinic 2022.

Dimension	Minimum	Maximum	Median	IQR
Physical well-being	32.1	100.0	85.7	46.4 - 92.9
Social-familial well-being	7.1	100.0	67.9	53.6 - 78.6
Emotional well-being	33.3	100.0	83.3	66.7 - 95.8
Functional well-being	0.0	100.0	75.0	60.7 - 78.6
Colorectal subscale	25.0	100.0	75.0	64.3 - 39.3
FACT-C total score	27.2	94.9	76.1	67.6 - 83.1

Note: IQR: Interquartile Range.

often a primary factor influencing HRQoL in cancer patients. A recent study found that functional status has a positive direct effect on quality of life ($\beta = 0.418$, $P < 0.001$).[14] However, contrary to findings in other studies, our results revealed that physical well-being had the highest median score among patients (85.7).[14,28,29] This discrepancy may suggest that the study population is experiencing less disease progression or is in remission. On the other hand, the Social-Family Well-Being dimension recorded the lowest median score (67.9), highlighting the disease's substantial impact on interpersonal and familial relationships—consistent with previous literature.[10,30] In Colombia, most research on cancer has focused on risk factors, underscoring the need for more studies centered on HRQoL.

Our findings emphasize the critical role of family and social support networks. Lack of financial support from family or friends was associated with a decline in quality of life ($\beta = -5.87$, $P = 0.015$), which may explain the low scores in the Social-Family Well-Being dimension. Prior research has linked a cancer diagnosis to anxiety and depression, but these symptoms may stabilize after colectomy surgery.[31] Emotional, physical, and sexual well-being are also highly valued by patients with colorectal cancer.[32,33]

The economic aspect emerged as a key factor affecting quality of life, a finding particularly relevant in Colombia.[34] Lack of satisfaction with income ($\beta = -10.83$, $P < 0.001$) and unemployment ($\beta = -5.76$, $P = 0.029$) were both associated with lower HRQoL. This suggests that patients are more concerned about the socioeconomic impact of the disease rather than the disease itself. Economic instability can exacerbate pre-existing social vulnerabilities, increasing anxiety about meeting basic needs.[35,36] Research has also shown a relationship between neighborhood socioeconomic status (n-SES) and colorectal cancer outcomes, with lower n-SES being associated with an increased risk of mortality (RR = 1.21; 95% CI: 1.16).[37] In our study, 46.0% of patients were from low socioeconomic backgrounds, reinforcing the relevance of economic disparities.

Socioeconomic disparities in HRQoL among colorectal cancer patients have been widely documented.[35,38] For example, a study involving 300 survivors found that patients with annual incomes ≤ 30,000 USD reported higher fatigue, more pain interference, greater depression, and lower physical functionality compared to those earning over 70,000 USD.[35] Although income levels were not directly assessed in our study, 49.2% of participants reported dissatisfaction with their income, and approximately 33.0% were unemployed. These findings point to the importance of economic disparities in our population.

Colorectal cancer outcomes reflect social inequalities and economic determinants of health.[35,39] While our study focused on HRQoL rather than broader social determinants, the significant role of income level and employment status reflects underlying social disparities. Previous research has demonstrated the relationship between social vulnerability indices and cancer detection, incidence, and mortality rates.[36,40] In countries with weak social safety nets, physical symptoms of the disease become secondary to concerns about economic stability and household income.[17,41] Medical disability and absenteeism resulting from cancer can reduce income and, in severe cases, lead to job loss.[39] This issue is compounded by informal employment and high unemployment rates in Colombia and the broader region, further impacting HRQoL.

It has been hypothesized that socioeconomic status influences HRQoL by providing better access to healthcare and treatment options.[42] However, this relationship may not fully explain the changes in HRQoL observed in our study population. Colombia's healthcare system offers broad coverage, making it one of the countries with low out-of-pocket health expenses.[43] Therefore, in our context, HRQoL is more closely associated with satisfaction with income, which affects the ability to meet basic needs, rather than access to healthcare services alone.[38,44]

Poor sleep quality also emerged as a significant factor negatively influencing HRQoL ($\beta = -12.33$, $P < 0.001$). Although poor sleep quality might be expected to affect the functional and physical well-being dimensions, both had median scores above 75.0 points in this study. Sleep disturbances are common among colorectal cancer patients and are often reported as distressing symptoms linked to fatigue.[45] Fatigue and insomnia, potentially resulting from inflammatory processes, are common among colorectal cancer survivors.[46] Up to 70% of CRC patients experience sleep problems.[47] Consistent with other studies, our findings show that poor sleep quality significantly impacts HRQoL, highlighting the

Table 3. Relationship of Quality of Life With Demographic, Health, Lifestyle Habit and Economic Variables. VIDA Clinic 2022.

Variable	Median	IQR	*P*-value
Sociodemographic			
Sex			
Male	75.7	69.1 - 82.4	0.561[a]
Female	77.2	67.6 - 83.1	
Age			
Old age	77.2	70.6 - 82.4	0.152[a]
Adulthood	75.4	58.1 - 83.1	
Socioeconomic stratum			
Medium-high	76.5	70.2 - 83.1	0.391[a]
Low	75.7	64.0 - 82.4	
Educational level			
Primary education	76.5	66.9 - 82.4	0.914[b]
Secondary education	75.7	67.6 - 82.4	
Tertiary education	76.1	70.6 - 83.1	
Occupation			
Employed	77.2	67.6 - 83.1	0.163[a]
Unemployed	73.5	67.6 - 79.4	
Health			
How often do you receive medical attention			
More than 1 month	77.2	69.1 - 83.1	0.181[a]
Every month/less than 1 month	75.0	66.9 - 82.4	
Self-medication			
Yes	79.4	66.9 - 85.3	0.132[a]
No	75.0	67.6 - 82.4	
Number of meals per day			
More than 3 times a day	77.2	67.6 - 83.1	0.045[a]
1-2 times a day	69.9	57.4 - 75.7	
Body Mass index (BMI)			
Normal	75.0	58.1 - 80.1	**0.038**
Overweight	77.6	69.9 - 83.1	
Obesity	83.1	73.5 - 88.2	
Underweight	71.3	59.2 - 78.7	
Lifestyle habits			
Smoking			
No	76.5	67.6 - 83.1	0.337[a]
Yes	74.3	50.7 - 77.9	
Alcohol consumption			
No	75.7	67.3 - 82.7	0.355[a]
Yes	76.5	70.6 - 87.5	
Sleep quality			
Good quality	79.4	75.0 - 86.8	**<0.001**[a]
Poor quality	69.9	57.4 - 77.9	
Physical excersive			
Yes	76.8	69.9 - 82.4	0.240[a]
No	73.9	61.4 - 83.1	
Economic			
Has financial support from family or friends			
Yes	77.2	70.6 - 82.4	0.110[a]
No	72.1	50.7 - 83.1	
Satisfaction with income level			
Yes	77.9	73.5 - 86.4	**<0.001**[a]
No	71.0	57.4 - 79.4	

(continued)

Table 3. (continued)

Variable	Median	IQR	*P*-value
Ability to cover medical expenses			
Yes	77.6	70.6 - 85.7	**0.003**
No	71.0	57.4 - 79.4	

[a]U of Mann Whitney test. [b]Kruskal Wallis test. IQR Interquartile range.

Table 4. Factors Associated With Quality of Life in Patients With CRC. VIDA Clinic 2022.

Variable	Coefficient	Std. Error	CI 95%	*P*-value
Constant	75.36	8.66	58.40; 92.33	<0.001
Sex (ref: Female)	−0.69	2.54	−5.66; 4.28	0.786
Age	0.18	0.12	−0.06; 0.42	0.148
Socioeconomic stratum (ref: low)	−0.54	2.43	−5.31; 4.22	0.823
Occupation (ref: employed)	−5.76	2.64	−10.93; −0.59	**0.029**
Education level (ref: primary)				
Secondary education	3.71	2.83	−1.84; 9.25	0.190
Tertiary education	4.94	3.04	−1.02; 10.90	0.104
Body Mass index (ref: normal)				
Overweight	2.99	2.42	−1.76; 7.74	0.217
Obesity	4.95	4.73	−4.31; 14.22	0.295
Underweight	−5.96	4.74	−15.24; 3.32	0.208
Poor sleep quality (ref: good quality)	−12.33	2.40	−17.04; −7.62	**<0.001**
No financial support from family or friends (ref: yes)	−5.87	2.27	−10.24; −1.10	**0.015**
Not satisfaction with income level (ref: yes)	−10.83	2.27	−15.78; −6.52	**<0.001**

Note: Std. Error: Standard Error. CI: Confidence interval. ref: Reference category.

importance of addressing sleep-related issues in patient care.[48-50]

One possible mechanism linking poor sleep quality to decreased HRQoL is the gut-brain axis.[51-53] Changes in sleep quality not only impair brain function but also affect intestinal functioning, suggesting a bidirectional relationship between the two systems.[53] Research has explored how cognitive impairment in colorectal cancer patients, though not directly caused by the disease, is related to its impact on fatigue, sleep disturbances, and the nervous system.[54] These findings underscore the critical role of the gut-brain axis in maintaining gastrointestinal homeostasis and patient well-being.

Our results align with theoretical models of HRQoL in colorectal cancer patients, which emphasize the importance of self-efficacy, social support, resilience, and functional status while reducing fatigue and pain to improve HRQoL after surgery.[14,55] While these models do not explicitly address socioeconomic and employment factors, our findings suggest that these factors play a crucial role in self-efficacy, as they influence patients' ability to manage their resources effectively.

This study presented some limitations. First, is the small sample size, which limits the statistical power and the ability to explore other variables that could further elucidate quality-of-life indices in colorectal cancer patients. Additionally, the sample did not represent all patients in the city. Future studies should include larger patient cohorts and data from multiple healthcare centers. Although some research suggests that quality-of-life does not differ by the clinical stage of the disease,[16] this variable should be considered in future analyses to assess its potential impact on HRQOL. Additionally, while a standardized telephone survey was used, there is a possibility that this method may have influenced patient responses, potentially leading to social desirability bias and the over-reporting of healthy behaviors, thus affecting data accuracy. However, the protocol was standardized and the surveyors followed instructions to reassure the patient and ensure their safety when answering. In addition, the instructions of the instrument are clear and objective to avoid this type of bias.

Nonetheless, this study is one of the first to examine the quality of life in CRC patients in Colombia, offering valuable insights into HRQOL within the framework of the Colombian healthcare system and the living conditions of its population. It lays a foundation for understanding the dynamics of HRQOL in CRC patients in this context. Information is essential for understanding the experiences of patients with this disease. Our findings highlight the crucial role of the socioeconomic context in shaping the health-disease process for these

individuals. Therefore, interventions must extend beyond the provision of healthcare services and access to treatments; they should also ensure that patients' basic needs are met. In other words, holistic interventions are required—those that address the broader socioeconomic and personal contexts of patients—to effectively improve quality of life and, in parallel, enhance survival rates.

Conclusion

Our statistical analyses indicate that quality of life is significantly associated with sleep quality, satisfaction with income levels, and unemployment among patients. These findings align with existing literature, reinforcing the pivotal role these factors play in HRQoL assessments. To foster optimal quality of life in patients with colorectal cancer, it is essential to adopt a holistic approach that integrates social, economic, and healthcare dimensions. Furthermore, addressing socioeconomic health inequalities is crucial for the effective management of this disease.

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Author Contributions

JLZ, MCPD, VVA, and JAZC participated in the conception and design of the study. JLZ, MCPD, VVA, and JAZC were responsible for data collection. ARM, LSGC and JESF for data analysis and interpretation. ARM and LSGC structured the draft of the article. JESF, LSGC performed a critical revision of the content. All authors reviewed and approved the final version of the article.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Ethical Statement

Ethical Approval

This study was ethically approved by the Ethics Committee on Research of the VIDA Clinic Foundation [In Spanish, Fundación Colombiana de Cancerología Clínica Vida], with code CEI-0190-03-2023, minute #122, granted on March 1, 2023, in Medellín, Colombia.

Informed Consent

The informed consent was obtained via telephone. During the entire research and data collection process, the patients were not put at risk at any time, their informed consent was obtained and the confidentiality of the information of each of the participants was guaranteed.

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Supplemental Material

Supplemental material for this article is available online.

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