

ORIGINAL RESEARCH

Observation of the Effects of Extended Comfort Nursing on Cancer-Related Fatigue in Patients with Lung Cancer Undergoing Chemotherapy

Qin Wang, BM; Beibei Hu, BM

ABSTRACT

Objective • This study aimed to evaluate the clinical effects of providing extended comfort care to lung cancer patients undergoing chemotherapy and its impact on cancer-related fatigue levels.

Methods • Using a retrospective data analysis approach, a total of 88 lung cancer patients receiving chemotherapy at our hospital from March 2021 to March 2022 were selected as research participants. They were divided into an observation group and a control group based on different nursing methods, with 44 patients in each group. The observation group received extended comfort nursing interventions, while the control group received routine nursing care. Patients' comfort levels in both groups were compared, and changes in cancer-related fatigue, self-efficacy, psychological state, coping style, sleep quality, and overall life quality were assessed.

Results • Following the nursing interventions, patients in the observation group exhibited better physical, psychological, spiritual, sociocultural, and environmental well-being compared to the control group ($P < .05$). The

observation group also showed lower scores for emotional exhaustion, physical exhaustion, cognitive exhaustion, and overall exhaustion compared to the control group ($P < .05$). Moreover, patients in the observation group demonstrated higher levels of self-efficacy on the health promotion strategy questionnaire (Supph) ($P < .05$) and lower scores on the self-rating anxiety and depressive symptoms scales ($P < .05$) after receiving nursing care. In terms of coping style, patients in the observation group exhibited lower avoidance and yield scores but higher face scores than the control group ($P < .05$). The observation group also reported higher overall life quality scale item grades ($P < .05$) and lower Pittsburgh Sleep Quality Index (PSQI) scores ($P < .05$) compared to the control group.

Conclusions • Extended comfort care for lung cancer patients during chemotherapy improves emotional and physical comfort and effectively reduces cancer-related fatigue levels. These findings have significant implications for clinical practice. (*Altern Ther Health Med*. 2023;29(8):376-383).

Qin Wang, BM, Department of Pulmonary and Critical Care Medicine, The First Affiliated Hospital of Soochow University, Suzhou, Jiangsu, China. **Beibei Hu, BM**, Oncology Department, The First Affiliated Hospital of Soochow University, Suzhou, Jiangsu, China.

Corresponding author: Beibei Hu, BM
E-mail: m13328001640@163.com

INTRODUCTION

Lung cancer is a prevalent malignant tumor characterized by its propensity for development and metastasis throughout the body. It carries a high incidence rate, fatality rate, and poor patient prognoses.¹ Current clinical trials frequently utilize targeted therapy, chemotherapy, and radiotherapy to manage lung cancer. However, these treatment modalities can lead to adverse effects such as headache, vomiting, and

cancer-related fatigue, the most frequently observed symptom.^{1,2} Relevant clinical studies have consistently demonstrated that cancer-related fatigue affects approximately 80% of patients with lung cancer undergoing chemotherapy.² Unlike general fatigue, cancer-related fatigue persists even after periods of rest. It intensifies patients' physical and mental distress, exacerbates symptoms such as anorexia and pain, triggers feelings of anxiety and depression, and significantly impacts their overall quality-of-life and treatment outcomes.³ Moreover, it may potentially contribute to disease progression or treatment interruptions.

Currently, the management of fatigue symptoms in lung cancer patients undergoing chemotherapy remains challenging within clinical settings. Therefore, research efforts have been directed toward exploring effective approaches to treat or alleviate cancer-related fatigue in this patient population. Current clinical strategies involve the use of pharmacological and non-pharmacological methods to mitigate symptoms

Table 1. Comparison of Basic Data between Both Groups (n = 44)

Group	Gender (n)		Age (Years)	Education Level (N)			Appetite In Recent 1 Month (n)		
	Male	Female		Primary School Or Below	Junior High School	High School And Above	Good	General	Poor
Control Group	38	6	62.32 ± 1.18	15	21	8	17	19	8
Observation Group	35	9	62.41 ± 1.26	18	20	6	19	15	10
χ^2/t	0.723		0.271	0.436	0.046	0.340	0.188	0.767	0.279
P value	.395		.787	.509	.831	.560	.665	.381	.597

Note: Data presented as mean ± standard deviation (age) and frequency (gender, education level, and appetite in recent 1 month). χ^2/t represents the chi-square test or independent sample *t* test, and *P* represents the corresponding *P* value.

associated with cancer-related fatigue. While pharmaceutical interventions can provide some relief, they often come with the risk of increased side effects when the duration of drug therapy is extended.⁴ On the other hand, non-pharmacological interventions encompass various measures such as exercise interventions, psychological counseling, and sleep therapy. These non-drug approaches have demonstrated the potential to alleviate cancer-related fatigue in patients.

Relevant studies have demonstrated that lung cancer patients undergoing chemotherapy can experience enhanced physical and emotional comfort and reduced fatigue by implementing scientifically grounded and appropriate nursing interventions.⁵ Building upon these findings, this study aims to analyze patient feedback and evaluate the application of extended comfort nursing in the care of lung cancer patients during chemotherapy. The specific process of the study is outlined below.

METHODS

Study Design

This study was conducted from March 2021 to March 2022 using a retrospective data analysis approach. A total of 88 lung cancer patients undergoing treatment during this period were included in the study. Based on the nursing strategy employed, the patients were divided into two groups, an observation group and a control group, with 44 patients in each group. Statistical analysis was performed to compare the data between the observational group and the control group of patients. The significance level was set at $P < .05$ to determine statistical significance. The detailed data and results of the analysis are provided in Table 1.

Inclusion and Exclusion Criteria

The following Inclusion criteria were used for participant selection: (1) Individuals with lung imaging and pathological examination confirming a diagnosis of lung cancer that met the diagnostic criteria; (2) Patients showing indications for chemotherapy and receiving non-surgical treatment; (3) Patients undergoing a chemotherapy cycle of at least 6 months; (4) Individuals capable of cooperating with the questionnaire workers or independently completing the questionnaire without assistance from medical professionals; and (5) Patients with a normal mental state and cognitive function.

The following exclusion criteria were used to exclude participants: (1) Patients with abnormal liver, renal, and coagulation function; (2) Individuals with concurrent other malignant tumors; (3) Patients with an expected survival time of fewer than 6 months; (4) Patients previously diagnosed with depression; and (5) Individuals who were lost to follow-up or transferred to another hospital.

Nursing Interventions and Study Groups

Control Group. The patients with lung cancer in the chemotherapy period received routine nursing care. The nursing staff provided comprehensive patient care throughout chemotherapy, promptly addressing any chemotherapy-related adverse reactions. They also provided detailed information regarding precautions, dietary guidelines, and other relevant aspects during chemotherapy. The nursing staff monitored the patients' psychological well-being during interactions and offered oral psychological counseling. Additionally, they ensured the appropriate lighting, temperature, humidity, and sound levels in the patient wards to create a comfortable resting environment. The nursing staff diligently followed the doctors' recommendations and implemented pain management strategies.

Observation Group. The subjects in this group received the extended comfort nursing scheme, which involved implementing various nursing interventions to maintain the patient's comfort during chemotherapy. A series of intervention measures were carried out, primarily focusing on the following areas:

Image and Comfort Nursing. Effective and timely communication with patients regarding potential changes in their appearance was crucial before chemotherapy. It was important to address the possibility of hair loss resulting from chemotherapy and emphasize to patients that hair loss is a temporary side effect and that hair will regrow after the completion of chemotherapy. Nursing staff should support patients in dealing with potential image-related concerns and help them maintain a positive outlook regarding hair regeneration post-chemotherapy. Additionally, patients were guided to address any hair loss during chemotherapy promptly and were provided guidance on selecting suitable wigs or hats to preserve their appearance and minimize feelings of shame or inferiority.

Comfort Nursing for Complications. During patient communication, the nursing staff provided warnings about potential chemotherapy side effects such as nausea, vomiting, bleeding, and neurological complications. Patients were guided to accept and manage these adverse reactions calmly and advised to follow the dietary principle of eating smaller, more frequent meals. Patients were instructed to consume easily digestible food and promptly remove any vomit. Dynamic ventilation systems were utilized to maintain fresh air in the patient wards. Nursing staff also closely monitored patients' hematological indicators, promptly detecting abnormalities and implementing appropriate care interventions. Special attention was given to observing patients' skin and gum bleeding, with detailed explanations provided to patients regarding the causes and nursing measures for these symptoms. Furthermore, vigilant monitoring of any negative neurological responses was conducted, and patients were advised to use melamine spoons for eating and avoid contact with metal objects. Warm and protective measures were implemented for patients experiencing abnormal limb sensations and weakness, and vitamin B supplementation was administered based on the doctor's recommendations.

Psychological Comfort Nursing. During interactions with patients, the nursing staff fully respected and acknowledged the information expressed by patients, promptly responded to their various needs, and made efforts to meet their reasonable and achievable requests. For unreasonable demands, the nursing staff patiently analyzed and provided persuasion. Detailed explanations of the diagnosis, treatment, and nursing measures were necessary to ensure patients could feel the care provided by the medical staff and enhance their sense of security. It was essential to objectively and truthfully discuss potential adverse reactions with patients, guiding them to weigh the benefits and drawbacks of chemotherapy and its associated side effects. This approach aimed to help patients face chemotherapy treatment with a positive and optimistic attitude. Implementing relevant educational programs can improve patients' ability to manage psychological stress and positively impact their overall well-being.

Social Comfort Care. The nursing staff collected relevant information from patients and their families, focusing on patient-centered care. Important social support networks, including family members and close relations, were invited to participate in a group chat. Propaganda and educational materials were shared with the families in the group to help them understand the importance of positive and effective family and social support in the treatment of diseases. The nursing staff also provided guidance to families on positive support skills and strategies. This approach aimed to empower families with the necessary knowledge and resources to provide meaningful support to patients during their treatment journey.

Observation Indicators

The effects of different nursing schemes were evaluated using the following indicators: patient comfort, cancer-

related fatigue, psychological state, coping style, sleep quality, quality-of-life, and self-efficacy.

Comfort Level. Patient comfort was assessed using the Comfort Scale (GCQ) after nursing activities. The scale included dimensions of physiological, psychological, spiritual, socio-cultural, and environmental comfort. The total score ranged from 0 to 100, with higher scores indicating greater comfort and pleasure.

Cancer-Related Fatigue. The Cancer Fatigue Scale (CFS) was used to assess physical, emotional, and cognitive fatigue. The scale consisted of a total of 15 items, with a maximum score of 60. The physical exhaustion scale ranged from 0 to 28, the emotional fatigue scale ranged from 0 to 16, and the cognitive fatigue scale ranged from 0 to 16. Lower scores indicated higher levels of fatigue.

Self-Efficacy. Self-efficacy was evaluated using the Health Promotion Strategy Questionnaire (Supph). The questionnaire comprised 29 items, with responses rated on a 1-5 scale. Higher scores indicated greater self-efficacy.

Psychological Status. The Self-rating Anxiety and Depression Scale (SAS and SDS) was used to assess clients' psychological status. Lower scores indicated better psychological well-being.

Coping Style. The Medical Coping Questionnaire (MCMQ) was employed to assess coping styles. It included three subscales: face, avoidance, and surrender, with a total of 20 items. Higher scores on the confrontation scale indicated a more dominant coping style, while lower scores on the avoidance and surrender scales indicated greater dominance.

Sleep Quality. Sleep quality was evaluated using the Pittsburgh Sleep Quality Index (PSQI), which ranged from 0 to 21. Lower scores indicated better sleep quality.

Quality-of-life. The quality of life evaluation scale assessed dimensions such as physical function, emotional function, role function, cognitive function, and social function. The scale ranged from 0 to 100, with higher scores indicating better quality-of-life.

Statistical Analysis

The data were analyzed using SPSS 20.0 software. Normally distributed and homogenous variance measurement data were presented as mean \pm standard deviation ($\bar{x} \pm s$). Independent sample *t* tests were conducted for pairwise comparisons. The count data were expressed as percentages (%), and pairwise comparisons were tested using the chi-square (χ^2) test. A *P* value less than .05 was considered statistically significant, indicating a significant difference.

RESULTS

Comparison of Comfort Scores

The data presented in Table 2 indicate that patients in the observational group had significantly higher scores in measures of physiological comfort, psychological comfort, spiritual comfort, socio-cultural comfort, and environmental comfort compared to those in the control group ($P < .05$).

Table 2. Comparison of Comfort Level between the two Groups (n = 44, points)

Groups	Physiological Comfort	Psychological Comfort	Spiritual Comfort	Socio-Cultural And Environmental Comfort
Control Group	62.50 ± 4.02	55.90 ± 2.75	57.53 ± 1.23	60.77 ± 2.62
Observation Group	77.03 ± 4.14	61.35 ± 4.16	69.61 ± 2.04	78.51 ± 1.65
<i>t</i>	17.354	7.597	34.414	41.651
<i>P</i> value	.001	.001	.001	.001

Note: Data presented as mean ± standard deviation.

Table 3. Comparison of Cancer-Related Fatigue between two Groups (n = 44, points)

Group	Emotional Fatigue		Physical Fatigue		Cognitive Fatigue		Total Grade	
	Before Nursing	After Nursing	Before Nursing	After Nursing	Before Nursing	After Nursing	Before Nursing	After Nursing
Control Team	13.58 ± 2.19	13.05 ± 1.20	8.99 ± 1.32	9.00 ± 1.05	9.16 ± 0.84	8.97 ± 0.77	31.82 ± 4.82	31.09 ± 2.84
Observation Team	13.64 ± 2.16	11.87 ± 0.77	9.33 ± 1.06	8.45 ± 0.60	9.17 ± 1.05	8.25 ± 0.28	32.06 ± 4.40	28.72 ± 1.72
<i>t</i>	0.083	5.789	0.929	3.046	0.250	6.486	0.334	4.999
<i>P</i> value	.934	.001	.355	.003	.803	.001	.739	.001

Note: Data presented as mean ± standard deviation.

Table 4. Comparison of Improvements in Self-Efficacy and Sleep Quality Between the Two Groups (n=44, points)

Group	SUPPH score		PSQI score	
	Before Nursing	After Nursing	Before Nursing	After Nursing
Control Group	43.60 ± 5.11	50.22 ± 6.43	12.89 ± 0.79	9.11 ± 0.48
Observation Group	43.57 ± 5.33	79.63 ± 7.03	12.95 ± 0.96	6.58 ± 0.25
<i>t</i>	0.063	0.712	0.371	30.663
<i>P</i> value	.950	.001		.001

Note: Data presented as mean ± standard deviation.

Table 5. Comparison of Coping Styles between Two Groups During Chemotherapy (n = 44, points)

Group	Face Scores		Avoidance Scores		Yield Grade	
	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing
Control Group	17.04 ± 1.18	17.59 ± 1.39	16.75 ± 1.37	16.50 ± 1.10	8.96 ± 0.60	8.86 ± 0.46
Observation Group	17.10 ± 1.07	18.96 ± 1.45	16.88 ± 1.23	15.69 ± 0.55	9.12 ± 0.53	8.08 ± 0.19
<i>t</i>	0.498	4.413	0.564	4.604	0.743	12.883
<i>P</i> value	.620	.001	.574	.001	.460	.001

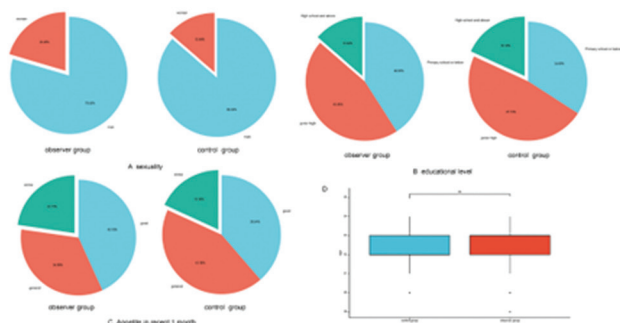
Note: Data presented as mean ± standard deviation.

Table 6. Comparison of Improvements in quality-of-life Scores between the two Groups (n = 44, points)

Group	Physical Function Score (Before Nursing)	Physical Function Score (After Nursing)	Role Function Score (Before Nursing)	Role Function Score (After Nursing)	Cognitive Function Score (Before Nursing)	Cognitive Function Score (After Nursing)	Emotional Function Score (Before Nursing)	Emotional Function Score (After Nursing)	Social Function Score (Before Nursing)	Social Function Score (After Nursing)
Control Group	60.41 ± 1.60	64.73 ± 2.11	57.01 ± 1.16	58.39 ± 2.37	60.86 ± 3.68	63.03 ± 2.29	65.38 ± 1.43	67.13 ± 1.86	57.33 ± 1.48	59.36 ± 1.86
Observation Group	60.21 ± 1.80	68.50 ± 3.68	56.90 ± 1.31	63.35 ± 3.00	60.68 ± 3.07	75.50 ± 2.73	65.18 ± 1.41	75.53 ± 2.21	57.32 ± 1.71	66.48 ± 2.69
<i>t</i>	0.503	6.456	0.436	8.215	0.184	22.618	0.673	18.162	0.234	13.055
<i>P</i> value	.616	.001	.664	.001	.855	.001	.503	.001	.816	.001

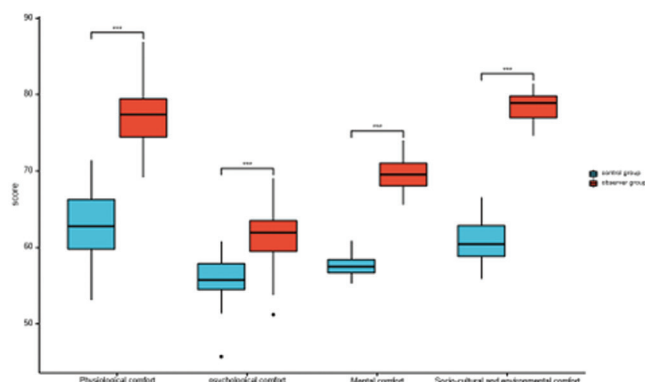
Note: Data presented as mean ± standard deviation.

Figure 1. Data analysis



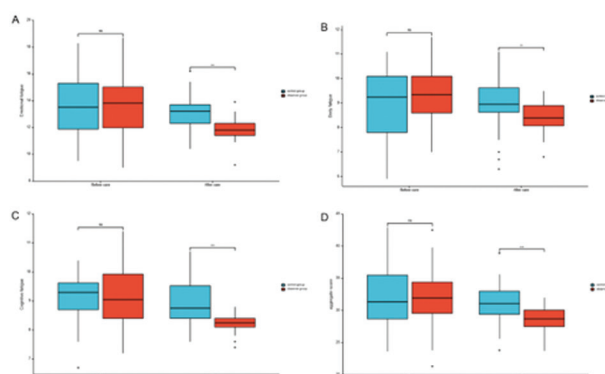
Note: The figure presents the analysis of data obtained in the study, illustrating the results and comparisons of various variables among the observational and control groups of lung cancer clients during chemotherapy. The data analysis includes measures of comfort, cancer-related fatigue, self-efficacy, psychological status, coping style, sleep quality, and quality-of-life. The figure provides a visual representation and insights into the findings and statistical comparisons between the two groups.

Figure 2. Comfort Score Analysis



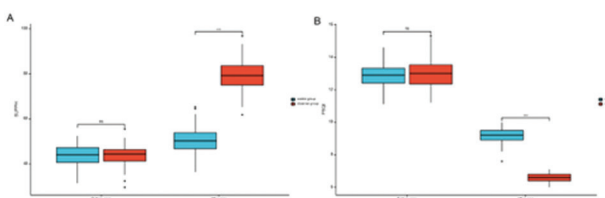
Note: The figure displays the analysis of comfort scores among the observational and control groups of lung cancer clients during chemotherapy. The comfort scores are evaluated based on physiological comfort, psychological comfort, spiritual comfort, and socio-cultural and environmental comfort dimensions. The figure visually presents the comparison of comfort scores between the two groups, providing insights into the differences in comfort levels experienced by the clients. The results highlight the impact of extended comfort nursing on enhancing the overall comfort of lung cancer clients during their chemotherapy treatment.

Figure 3. Cancer-Related Fatigue Score Analysis



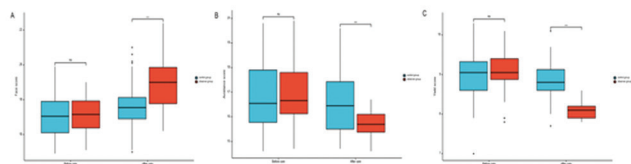
Note: The figure depicts the analysis of cancer-related fatigue scores in the observational and control groups of lung cancer clients during chemotherapy. The scores are assessed based on emotional fatigue, physical fatigue, cognitive fatigue, and the total grade of fatigue. The figure presents a visual comparison of the scores before and after nursing interventions, highlighting the improvements in fatigue levels within each group. The results indicate that extended comfort nursing has a significant impact on reducing cancer-related fatigue in lung cancer clients undergoing chemotherapy.

Figure 4. Analysis of self-efficacy and sleep quality between groups



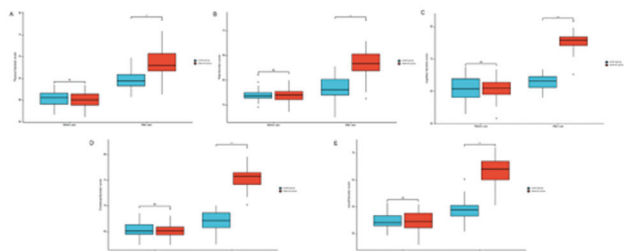
Note: The figure presents the self-efficacy and sleep quality measures analysis between the observational and control groups of lung cancer clients during chemotherapy. It illustrates the differences in self-efficacy and sleep quality scores before and after nursing interventions, highlighting the positive impact of extended comfort nursing on improving these factors. The figure provides valuable insights into the effectiveness of nursing interventions in enhancing self-efficacy and sleep quality in lung cancer clients.

Figure 5. Coping style analysis between the groups



Note: The figure depicts the analysis of coping styles between the observational and control groups of lung cancer clients during chemotherapy. It visually compares the scores of face, avoidance, and yield dimensions of coping style before and after nursing interventions. The figure highlights the differences in coping strategies adopted by the two groups and the impact of extended comfort nursing on enhancing adaptive coping styles. The findings provide insights into the effectiveness of nursing interventions in improving coping mechanisms in lung cancer clients.

Figure 6. Changes in quality-of-life scores between groups



Note: The figure illustrates the changes in quality-of-life scores between the observational and control groups of lung cancer clients during chemotherapy. It displays the scores for physical function, role function, cognitive function, emotional function, and social function dimensions of quality-of-life. The figure visually demonstrates the improvements in quality-of-life experienced by the observational group compared to the control group. These results highlight the positive impact of extended comfort nursing on enhancing various aspects of quality-of-life in lung cancer clients.

Comparison of Cancer-Related Fatigue Scores

The data presented in Table 3 indicate that there were no statistically significant differences in emotional, physical, cognitive, and overall fatigue scores between the two groups before the implementation of nursing activities ($P > .05$). However, following the implementation of nursing activities, the scores of patients in the observational group were significantly lower than those in the control group ($P < .05$).

Comparison of Self-Efficacy and Sleep Quality

The data presented in Table 4 indicate that there were no statistically significant differences in SUPPH and PSQI scores between the observational and control groups before the implementation of nursing interventions ($P > .05$). However, following the nursing interventions, clients in the observational

group had significantly higher SUPPH scores and lower PSQI scores compared to the control group ($P < .05$).

Comparison of Coping Styles

The data presented in Table 5 indicate that there were no statistically significant differences in face scores, avoidance scores, and yield scores between the observational and control groups before the implementation of nursing interventions ($P > .05$). However, after completing nursing tasks, clients in the observational group exhibited higher face scores and significantly lower avoidance and yield scores compared to the control group ($P < .05$).

Comparison of Life Quality

The data presented in Table 6 indicate that there were no statistically significant differences in the grades for any of the life quality dimensions between the groups before the implementation of nursing interventions ($P > .05$). However, following the implementation of nursing interventions, clients in the observational group scored significantly higher on each life quality measure compared to clients in the control group ($P < .05$).

DISCUSSION

Lung cancer is a malignant tumor characterized by its high incidence and rapid progression, leading to impaired organ function in affected individuals. Clinical manifestations of the disease primarily include dyspnea, chest pain, and hemoptysis.⁶ Currently, chemotherapy is a mainstay in the clinical management of lung cancer to control disease progression. However, chemotherapy can be accompanied by side effects such as vomiting and hair loss, despite its potential for alleviating disease-related symptoms. Moreover, patients may experience sleep disturbances that impact their psychological and emotional well-being, contributing to the development of cancer-related fatigue. As chemotherapy duration extends, negative emotions tend to worsen, significantly diminishing patients' quality-of-life. Inappropriate interventions may result in treatment discontinuation and disease progression.⁷ Notably, relevant clinical studies have demonstrated that the intervention of cancer-related fatigue by medical staff plays a crucial role in improving patients' condition and prognosis.⁸

In the context of chemotherapy for lung cancer patients, the intervention of medical staff in addressing cancer-related fatigue holds significant importance in improving the patient's condition and prognosis. The conventional nursing approach primarily focuses on maintaining the physiological comfort of lung cancer patients, often overlooking the impact of chemotherapy on the multidimensional aspects of their comfort.⁹ In contrast, extended comfort nursing represents a novel nursing model that expands upon the conventional approach by incorporating various nursing issues that affect the comfort of lung cancer patients during chemotherapy into daily care practices. This model is characterized by its comprehensive and personalized nature.¹⁰

By adopting the extended comfort nursing approach, healthcare professionals can tailor their nursing interventions based on the unique needs and circumstances of lung cancer patients undergoing chemotherapy, effectively addressing the demand for comfort care. This approach also encompasses psychological comfort care, image-related comfort care, and care related to managing adverse reactions, thereby significantly enhancing patients' physiological comfort and overall comfort across all dimensions.¹¹ The findings of this study support the earlier claim, as patients in the observational group consistently scored higher in terms of comfort compared to those in the control group.

According to the findings of the study, participants in the observational group exhibited significantly lower levels of cancer-related fatigue compared to those in the control group. Additionally, the observational group achieved significantly higher scores on all quality-of-life measures, indicating that implementing prolonged comfort nursing during chemotherapy for lung cancer patients can effectively reduce cancer-related fatigue and positively impact the overall quality-of-life. Ensuring patients complete the full course of chemotherapy on schedule is crucial for achieving optimal disease control and maintaining a satisfactory quality-of-life.^{12, 13}

Chemotherapy treatment can significantly impact various dimensions of comfort, affecting patients' emotional states, sleep quality, and severe fatigue. This fatigue can hinder the timely and adequate completion of chemotherapy, negatively impacting disease control and the overall physical and mental well-being of patients, thereby affecting their quality-of-life.¹⁴

In the broader context, extended comfort nursing approaches implement targeted interventions to address the impaired comfort experienced by lung cancer patients during chemotherapy. Maintaining a relatively high level of overall comfort helps minimize interruptions in chemotherapy caused by discomfort, enabling patients to adhere to their treatment plans. This, in turn, ensures the effectiveness of chemotherapy and helps prevent the exacerbation of cancer-related fatigue resulting from physical and psychological discomfort.^{15,16}

In the study, it was observed that patients in the observational group had significantly higher scores in Self-rating Anxiety Scale, Self-rating Depression Scale, self-efficacy, Pittsburgh Sleep Quality Index, and coping style compared to patients in the control group. These findings suggest that extended comfort care for lung cancer patients during chemotherapy can effectively reduce negative emotions, enhance self-efficacy, and promote a positive emotional state, ultimately mitigating the impact of the disease and medical interventions on patients' sleep quality.

One possible explanation for these results is that extended comfort nursing places a strong emphasis on effective nurse-patient communication and patient education. From the patients' perspective, nursing staff who consider their individual needs and actively engage family members, relatives, and friends in the care process can provide valuable social support, leading to emotional improvement.^{17,18}

Additionally, the conscientious implementation of educational interventions helps patients develop an accurate understanding and positively influences the adoption of health-promoting behaviors. Moreover, it fosters a favorable attitude toward disease management and treatment.^{19,20}

Study Limitations

Despite the valuable insights obtained from this study, it is important to acknowledge certain limitations. Firstly, the study was conducted within a specific time frame and at a single healthcare facility, which may limit the generalizability of the findings to other settings or populations. Additionally, the study relied on self-report measures, which are subject to response bias and may not fully capture the nuances of patients' experiences. Furthermore, the study design was observational, making it susceptible to confounding factors and limiting causal inferences. The sample size was also relatively small, which may affect the statistical power and precision of the results. Lastly, the study focused on a specific nursing intervention, and the effects of other potential interventions or factors were not explored. Future research with larger, diverse samples and rigorous study designs is needed to further validate and expand upon the findings of this study.

CONCLUSION

In conclusion, the implementation of extended comfort care during chemotherapy for lung cancer patients has shown promising results in reducing cancer-related fatigue, improving emotional well-being, enhancing self-efficacy, and enhancing sleep and overall quality-of-life. These findings hold considerable practical significance in clinical settings. However, it is important to note that the sample size in this study was relatively small, and the research period was limited, which may introduce potential bias. Future studies should aim to include larger sample sizes to validate further and strengthen these findings.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

AUTHORS' CONTRIBUTIONS

All Authors have made equal contributions to this work.

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