

Factors Affecting the Quality of Life of Patients with Gynecological Cancer Patients: A Narrative Review

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Abstract

Background: Gynecological cancers and their treatment can affect patients' physical, psychological, social, sexual, and functional well-being. **Objective:** To identify and synthesize factors affecting the quality of life of patients with gynecological cancer. **Method:** A narrative review searched Google Scholar, PubMed, Scopus, and ScienceDirect for open-access original studies published in English or Indonesian during 2020-2025. Of 1,604 records identified, 501 were screened, 268 full texts were assessed, and 12 studies were included. **Result:** The included studies identified five interrelated factor groups: psychological factors, especially anxiety and depression; family and social support; physical and functional symptoms such as pain, fatigue, nausea, insomnia, and activity limitations; sexual functioning; and comorbidities or pretreatment characteristics. **Conclusion:** Quality of life in gynecological cancer is multidimensional and is shaped by clinical, functional, psychological, social, and sexual factors. **Recommendation:** Nursing care should integrate symptom management, psychological support, family involvement, sexual-health assessment, and comorbidity management; future studies should examine differences by cancer type, disease stage, and treatment phase.

Keywords: Quality of Life; Gynecological Cancer;
Physical Factors; Psychological Factors; Social Support

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INTRODUCTION

Gynecological cancer can be defined as a disease that attacks the female reproductive organs in which the cells in these organs grow abnormally. There are five types of cancer that can be classified into gynecological cancer, namely cervical cancer, ovarian cancer, uterine cancer, vaginal cancer, and vulvar cancer (1). Gynecological cancer cases are estimated at 3.6 million annual incidents and more than 1.3 million deaths. In Indonesia, approximately 62,247 cases and 33,494 deaths were recorded in 2022 (2).

Quality of Life is an individual's perception of their position in life, considering the cultural and value systems they are part of and how it relates to their personal goals, expectations, standards, and concerns (3). Patients diagnosed with gynecological cancer may experience changes in their quality of life due to the impact of the disease and the treatment they are undergoing (4). The impact of the disease and treatment experienced by patients can change their quality of life, which, if not controlled, could risk worsening the patient's condition and disrupting the healing process. Poor quality of life may contribute to reduced treatment adherence, decreased functional capacity, psychological distress, and poorer overall health outcomes (5). Meanwhile, improving the quality of life of cancer patients can increase compliance in the treatment process and can be used as evaluation material for health workers when planning their following actions.

Several factors, such as physical factors, such as nausea, vomiting, pain, fatigue, and dependence on daily activities, can cause changes in the quality of life in patients with gynecological cancer. Apart from that, there are also psychological and social factors, such as anxiety, depression, sleep disorders, confusion, feelings of helplessness, and family support. Therefore, understanding the various factors that influence the quality of life of cancer patients is essential for designing more holistic and effective treatment approaches to improve overall patient well-being.

In addition, optimal quality of life for cancer patients during the treatment and

recovery period can maximize their resilience in dealing with the various symptoms and complaints they feel (6). Efforts to improve the quality of life of cancer patients can support successful treatment, speed up recovery, and help patients overcome the physical, psychological, and social challenges they face during the treatment period.

Unlike previous reviews that often focused on a single type of gynecological cancer or specific treatment-related symptoms, this review synthesizes multidimensional factors affecting quality of life across gynecological cancers, including physical, psychological, social, sexual, and comorbidity-related factors. The included studies were published from 2020 to 2025.

Therefore, it is important to understand the factors influencing a patient's quality of life to design a more holistic and effective treatment approach. Given the complexity of these factors, further research is needed to develop appropriate approaches to caring for gynecological cancer patients. Thus, narrative review literature is very relevant to explore various perspectives and previous research findings to provide a comprehensive picture of the factors influencing the quality of life of gynecological cancer patients and effective ways to improve their well-being.

OBJECTIVE

This review aimed to identify and synthesize factors affecting the quality of life of patients with gynecological cancer.

METHODS

Design

This literature review was made using the narrative review method. A narrative review is a type of literature review that aims to provide a summary and synthesis of various sources relevant to a particular topic. The author combines information descriptively and critically without having to follow a strict systematic procedure (7).

Search strategy

A literature search was conducted using Google Scholar, PubMed, Scopus, and ScienceDirect. Search terms combined the concepts of quality of life; gynecological,

cervical, ovarian, endometrial, uterine, vulvar, and vaginal cancer; psychological factors; family support; pain; fatigue; and sexual function.

Inclusion and exclusion criteria

Eligible articles were original research studies published from 2020 to 2025, written in English or Indonesian, available as open-access full text, and relevant to the review objective. Articles were excluded if they were duplicates, irrelevant to the objective, unavailable in full text, not open access, or categorized as review articles, editorials, commentaries, or conference abstracts.

Study selection

The searches identified 1,604 records. Before screening, 1,103 records were removed because they were duplicates, written in languages other than English or Indonesian, or marked as ineligible by automation tools. The remaining 501 records underwent title and abstract screening; 268 reports were assessed for eligibility. After exclusion of review articles and reports without open-access full text, 12 studies were included in the narrative synthesis.

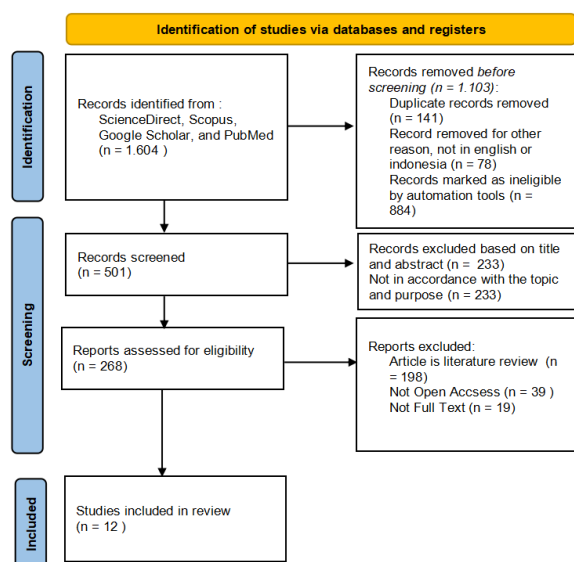


Figure 1. Flow of study identification and selection.

RESULT

After screening articles from four databases, 12 studies met the inclusion and exclusion criteria. The selected studies varied in terms of sample size, cancer type, disease stage, treatment phase, and research design. Most

studies used cross-sectional designs, while others applied retrospective or qualitative approaches.

The findings were categorized into five main factors affecting quality of life among patients with gynecological cancer. Three studies identified psychological factors, particularly anxiety and depression. Three studies highlighted the importance of family, partner, and social support. Four studies focused on physical and functional factors, including fatigue, nausea, vomiting, pain, insomnia, and limitations in daily activities. One study emphasized sexual functioning, while another identified comorbidities and pretreatment factors as important contributors to quality of life.

Overall, the findings indicate that quality of life among patients with gynecological cancer is influenced by multidimensional and interrelated factors involving physical, psychological, social, sexual, and clinical aspects.

Psychological Factors

Psychological factors were consistently associated with quality of life, particularly anxiety, depression, psychological distress, and stress. Among cervical cancer patients undergoing chemotherapy, Izza et al. reported that 57.3% experienced severe anxiety, while 50.9% were categorized as having good quality of life. A statistically significant relationship was found between anxiety level and quality of life ($p < 0.001$) (8)

Similar findings were reported among patients with gynecological malignancies. Shang et al. found that anxiety and depression remained relevant psychological problems following surgery, with anxiety and depression reported in 18.75% and 18.13% of patients one month after surgery, respectively (9).

Overall, psychological distress, particularly anxiety and depression, was consistently associated with poorer quality of life across different clinical contexts and treatment phases (8–10,18,19).

Family and Social Support

Family and social support emerged as important factors associated with quality of life. Patients receiving stronger family support

tended to report better quality of life, while social support was also positively associated with social and environmental dimensions of quality of life (11–13,19).

Physical and Functional Factors

Physical symptoms, including pain, fatigue, nausea, vomiting, insomnia, and activity limitations, were repeatedly associated with poorer quality of life among patients with gynecological cancer (13–17). Winarto and Halim reported a decline in global health status and social functioning as chemotherapy progressed, accompanied by increases in nausea and vomiting, pain, and insomnia (14). Patients experiencing moderate-to-severe pain were more likely to experience higher fatigue and poorer quality of life than those with mild pain (17).

Sexual Functioning

Sexual functioning was less frequently examined than psychological and physical factors. However, Yeha et al. reported that sexual life had the lowest quality-of-life score among the domains assessed (19).

Comorbidities and Pretreatment Characteristics

retreatment psychological and clinical characteristics were also associated with subsequent quality of life. Depression, anxiety, socioeconomic deprivation, and activity-limiting comorbidities were associated with poorer quality of life, whereas higher self-efficacy and age ≥ 50 years were associated with better outcomes (18).

Overall, the reviewed evidence indicates that quality of life among patients with gynecological cancer is associated with multiple interconnected domains, including psychological distress, family and social support, physical symptom burden, functional limitations, sexual functioning, and clinical or pretreatment characteristics (8–19).

Psychological distress (8–10,18,19), family and social support (11–13,19), physical and functional symptoms (13–17), sexual functioning (19), and comorbidities or pretreatment characteristics (18) emerged as the major factors associated with quality of life.

Table 1. Characteristics and findings of the 12 included studies.

#	Study	Purpose, design, and sample	Main findings
1	Izza, L., Rahayu, T., & Wuringsih, A. Y. (2023). (8) The Relationship Between Anxiety Level and Quality of Life for Cervical Cancer Patients Undergoing Chemotherapy at Hospital Dr. Kariadi	The aim of the study was to identify the level of anxiety about the quality of life of cervical cancer patients undergoing chemotherapy at RSUP. Dr. Kariadi. 110 cervical cancer patients undergoing chemotherapy at the Kasuari building from July to September 2022 Quantitative research using a cross sectional approach	The level of severe anxiety in cervical cancer patients is 57.3%. Good quality of life in cervical cancer patients was 50.9%. The research results were obtained (p-value = 0.000), so that Ho was rejected. There was a relationship between the level of anxiety and the quality of life of cervical cancer patients undergoing chemotherapy at RSUP Dr. Kariadi
2	Yeha, Y.-C., Lu, C.-H., Chen, I.-H., Kuo, S.-F., & Huang, Y.-P. (2021) (19) Quality of life and its predictors among women with gynaecological cancers	To identify QOL predictors among patients with gynaecological cancers, and examine the relationship between QOL and demographics, stress, coping strategies, and social support 111 patients who were recruited from the gynaecological oncology outpatient department of a hospital in Taiwan Across-sectional survey	Patients QOL was positively correlated with marriage, emotion - focused coping, problem-focused coping, and social support. QOL was negatively correlated with malfunctioning coping strategies and stress. Regression models accounted for 19%–30% of the variance across the four domains of QOL. Stress was a significant predictor of all QOL domains. Social support was the main predictor of the social relationships and environment QOL domains. The lowest QOL score was for sexual life.

#	Study	Purpose, design, and sample	Main findings
3	Oktaviani, U., Purwaningsih, H. (2020) (11) Family Support for the Quality of Life of Cervical Cancer Patients	Determined the correlation between family support and the life quality of cervical cancer patients in Dr. Moewardi Surakarta. 88 samples A quantitative method with A descriptive approach.	Respondents who get less family support, most of their quality of life is lack as many as 8 respondents (47.1%). Respondents with sufficient family support, mostly have poor life quality as many as 18 respondents (58.1%). While respondents who receive good family support, mostly have good life quality as many as 22 respondents (55.0%). Chi Square test results obtain p-value $0,000 < \alpha (0,05)$, so that it can be concluded that there is significant correlation between family support and the life quality of Cervical cancer patients in Dr. RSUD. Moewardi Surakarta
4	Glasspool, R., Wheelwright, S., Bolton, V., Calman, L., Cummings, A., Elledge, B., Foster, R., Frankland, J., Smith, P., Stannard, S., Turner, J., Wright, D., & Foster, C. (2022). (18) Modifiable pre- treatment factors are associated with quality of life in women with gynaecological cancers at diagnosis and one year later: Results from the HORIZONS UK national cohort study.	To determine what pre treatment factors are associated with quality of life (QOL) at baseline (pre- treatment) and 12 months 1222 women with a confirmed diagnosis of endometrial, ovarian, cervical or vulvar cancer from 82 UK NHS hospitals -	QOL declined between baseline and 3 months, followed by an improvement at 12 months. Baseline (pre-treatment) factors associated with worse QOL at both baseline and 12 months were depression, anxiety, living in a more deprived area and comorbidities which limit daily activities, whereas higher self-efficacy and age of 50+ years were associated with better QOL
5	Liu, D., Weng, J. Sen, Ke, X., Wu, X. Y., & Huang, S. T. (2023). (17) The relationship between cancer- related fatigue, quality of life and pain among cancer patients.	This study aimed to select patients with cancer-related pain to further analyze the relationship between pain severity, fatigue severity, and quality of life. 224 patients with cancer- related pain who were undergoing chemotherapy and met the inclusion criteria in two hospitals of two provinces from May to November 2019. a cross sectional design	Most patients with mild pain only experienced mild fatigue, and their quality of life was also at a moderate level. Patients with moderate and severe pain mostly had moderate or higher levels of fatigue and a lower quality of life. There was no correlation between fatigue and quality of life in patients with mild pain ($r = 0.179$, $P = 0.104$). There was a correlation between fatigue and quality of life in patients with moderate and severe pain.
6	Sobar & Suhartini, L. (2022) (12) The Influence of Coping, Family Support and Motivation on the Quality of Life of	To determine the influence of coping, family support, and motivation on the quality of life in cervical cancer 54 cervical cancer patients who get treatment (hysterectomy,	The family support variable can explain 39,2% quality of life of cervical cancer patients and 60,8% was explained by another variable outside of this research. The family support variable can explain 58,7% motivation

#	Study	Purpose, design, and sample	Main findings
	Cervical Cancer Patients	radiation, chemotherapy, and chemoradiation) In Indonesia Army Hospital Gatot Soebroto 2015 cross-sectional	variable and 41,3% was explained by another variable outside of this study.
7	Shang, H.-X., Ning, W.-T., Sun, J.-F., Guo, N., Guo, X., Zhang, J.-N., Yu, H.-X., & Wu, S.-H. (2024) (9) Investigation of the quality of life, mental status in patients with gynecological cancer and its influencing factors.	To examine the current status of quality of life (QoL), anxiety, and depression in patients with gynecological cancer and to analyze the factors associated with it. 160 patients with gynecological malignancies treated at Shanxi Bethune Hospital from June 2020 to June 2023 Analyzed retrospectively.	The overall QoL score of the patients 6 months after surgery was 76.39 ± 3.63 points. One month after surgery, some patients experienced anxiety and depression, with an incidence of 18.75% and 18.13%, respectively. Logistic analysis revealed that good sleep was a protective factor against anxiety and depression in patients with gynecological tumors, whereas physical pain was a risk factor
8	Winarto, H., Halim, W. (2020) (14) Quality of Life Assessment in Patient who Underwent Chemotherapy in Gynecological Oncology Division	To determine the quality of life in cancer patients who underwent chemotherapy treatment Patients with cancer, who had undergone chemotherapy and willing to participate A cross sectional	Sixty three responders participated in the study. As the treatment progressed , there was a signifivant decrease in Global Health Status (GHS) and social function. In symptom scales, there was a significant increase in nausea and vomiting, pain, and insomnia.
9	Wu, W., He, X., Li, S., Jin, M., & Ni, Y. (2023) (15) Pain nursing for gynecologic cancer patients.	overview of the pathological factors that contribute to pain in patients with gynecological malignancy while highlighting the underlying mechanisms of pain in this population Not reported.	Patients diagnosed with advanced gynecological malignancies, including cervical cancer, endometrial cancer, and ovarian cancer, experience varying degrees of physical pain. This pain significantly impacts the psychological and physiological wellbeing of patients, ultimately compromising the efficacy of treatment. Consequently, the appropriate diagnosis and management of pain are of utmost importance to improve patient outcomes and reduce suffering
10	Siao, C. L., Chang, W. C., Chen, C. H., Lee, Y. H., & Lai, Y. H. (2024) (13) Symptoms, distress, finances, social support, resource utilization, and unmet care needs of patients with gynecological cancer.	This study explored the unmet care needs of gynecological cancer patients, including overall and subdomain needs (i.e., physical and daily living needs, psychological and emotional needs, care and support needs, and health-system and information needs), and related factors 118 gynecological cancer patients treated at a medical center in northern Taiwan cross-sectional study	73% had unmet psychological and emotional needs, followed by 54% with unmet health system and information needs. The most common physical symptoms were insomnia, fatigue, and pain, with 51.7% experiencing moderate or high levels of distress. Overall, the patients received considerable social support, both instrumental and emotional, primarily through medical information booklets (39.0%), cancer information websites (28.8%), and rehabilitative resources (20.3%).
11	Surjoseto, R., Sofyanty, D. (2022) (10) The Effect of	to examine and analyze the effect of anxiety and depression on the quality of life of cervical cancer patients	the results of the research, it was concluded anxiety and depression in patients cervival cancer have affect the patients quality of life.

#	Study	Purpose, design, and sample	Main findings
	Anxiety and Depression on the Quality of Life of Cervical Cancer Patients at Dr. Cipto Mangunkusumo Hospital	at dr.Cipto Mangunkusumo Hospital, Jakarta Respondents in this study were 58 patients at dr.Cipto Mangunkusumo Hospital Jakarta quantitative methods with a cross sectional approach	
12	Christiyanty, Sulistyarini, W., Sirait, Y. (2021) (16) Phenomenon Study: Quality of Life of Women with Cervical Cancer in Physical Health Aspects	Exploring the quality of life experiences of women with cervical cancer in terms of physical health. Participants as many as four people with four inclusion criteria Phenomenological approach	Decreased physiological function in women with cervical cancer; Chronic pain experienced by women with cervical cancer

DISCUSSION

The 12 included studies identified psychological factors (8-10), family and social support (11-13), physical and functional factors (14-17), sexual functioning, and comorbidities or pretreatment characteristics (18,19) as important influences on quality of life among patients with gynecological cancer.

Psychological factors, such as anxiety, can affect the quality of life of gynecological cancer patients because, since the diagnosis of the disease and the start of treatment, patients feel afraid and anxious, which can even lead to depression (8). Along the way, anxiety is a feeling that cannot be avoided by patients where these feelings come from several things, such as fear of recurrence, the effects of medical procedures, finances, unfulfilled roles as mothers and wives, work, and even death (10).

High anxiety and depression in cervical cancer patients can inhibit the healing process, cause physical weakness, reduce interest, and slow down the progress of treatment. If these symptoms occur for a long time, they will worsen the patient's condition and ultimately reduce their quality of life (10). In addition, one month after surgery, the patient's mental health status tends to decline due to the transition from lack of knowledge about the disease to a period of depression, but with ongoing care, patients begin to enter the acceptance phase, and their mental health improves in about 6 months (9). Thus, anxiety and depression in

gynecological cancer patients can inhibit healing and reduce the quality of life. However, ongoing care helps them enter the acceptance phase and improve their mental health.

Another factor that can affect the quality of life of patients with gynecological cancer is the support of family and those around them. Family support is the action and acceptance of the family towards individuals suffering from the disease. When patients receive support from their families, whether instrumental, informational, problem-solving, or emotional, it will increase their self-confidence and motivation in dealing with problems and affect the patient's well-being (11).

In addition, family or those closest to them who provide full attention, moral encouragement, and cooperation with care will help patients undergo cancer treatment and change their perceptions of the disease (12). According to Siao et al. (13), most patients choose their partners as their main source of support and play an important role in regulating emotions during their illness. Thus, the support of family and those closest to them plays a crucial role in improving the quality of life of gynecological cancer patients, helping them deal with emotional problems, such as anxiety, worry, and stress, and strengthening motivation and self-confidence during the treatment process.

Furthermore, other factors that affect the quality of life of cancer patients are functional

factors; this can be interpreted as the internal condition of an individual's biological health, including how well the body functions in activities, organs, body systems, and the biological functions of the body as a whole, including behaviors that support health (20). Cancer patients who are undergoing treatment, such as chemotherapy and radiotherapy, will experience changes in their physical appearance due to the effects of the treatment, resulting in decreased physiological function and having an impact on decreased quality of life (16). This is because, in addition to prolonging the patient's life, chemotherapy can have side effects that affect the quality of life because even though chemotherapy drugs suppress rapid cell growth, their side effects still affect patients (21).

Some physiological impacts felt as a result of treatment and cancer are fatigue, limited physical activity, pain, and so on (14). Fatigue is felt a few days to two weeks after chemotherapy, making a person feel weak, quickly tired, and have activity intolerance (16). In addition, patients also tend to feel pain as a result of treatment or the disease itself. The effects of fatigue and pain can be reflected in the patient's daily activities to some extent, so it can burden the patient in carrying out activities, socializing, and disrupting their cognitive function (15,22). Furthermore, pain that does not improve can cause pessimism, anxiety, and depression, thus negatively impacting the patient's quality of life. Therefore, nurses have an important role in providing effective pain management to optimize patient well-being (15).

Women who have gynecological cancer are also not free from problems regarding sexual aspects and comorbidities. According to previous research, chemotherapy and radiotherapy also have an impact on low sexual life. This is caused by decreased sexual interest after the patient is diagnosed and undergoes treatment. In addition, decreased sexual interest is influenced by feelings of being less attractive and concerns about the recurrence of the disease during sexual intercourse (19). In addition, gynecological cancer patients who have comorbidities often experience limitations

in daily activities, which can affect their quality of life (20).

Thus, it can be concluded that the quality of life of gynecological cancer patients can experience improvement or decline which can be caused by several factors that affect their quality of life, both psychological, physical, and social. Therefore, it is important to know which factors are disturbed in order to prevent a decline in their quality of life and to be able to provide appropriate interventions.

CONCLUSION

This narrative review found that the quality of life of patients with gynecological cancer is influenced by psychological, physical, functional, social, sexual, and clinical factors. Anxiety, depression, pain, fatigue, treatment-related symptoms, family support, sexual functioning, and comorbidities were identified as important determinants. These findings highlight the need for holistic and patient-centered nursing care that integrates symptom management, psychological support, family involvement, sexual-health assessment, and comorbidity management.

LIMITATIONS

The limitations of this study are that the reference sources used are still limited to certain languages and only use four databases so that they do not cover all existing relevant sources, both in terms of accessibility, cost, and time. In addition, several articles reviewed have different methodologies so that results and conclusions are not easy to generalize. This study is also still general in various stages of gynecological cancer and various phases of treatment, not focused on a particular treatment phase or stage.

RECOMMENDATION

Clinical nursing care should routinely assess and address pain, fatigue, anxiety, depression, activity limitations, family support, sexual health, and comorbidities. Future studies should examine quality of life by specific cancer type, disease stage, treatment phase, and demographic characteristics.

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