

Cervical Cancer Patients' Perceptions of Treatment Experiences at Dr. Moewardi Regional General Hospital, Surakarta, Central Java, Indonesia

La Karman Gojali¹⁾, Eti Poncorini Pamungkasari²⁾, Bhisma Murti¹⁾, Argyo Demartoto³⁾, Revi Gama Hatta Novika^{1,4)}, Haryani Saptaningtyas⁵⁾

¹⁾Master's Program in Public Health, Faculty of Medicine, Universitas Sebelas Maret

²⁾Public Health Department, Faculty of Medicine Universitas Sebelas Maret

³⁾Study Program of Social and Political Sciences, Universitas Sebelas Maret

⁴⁾Midwifery Study Program Faculty of medicine Universitas Sebelas Maret, Indonesia

⁵⁾Department of Community Empowerment, Universitas Sebelas Maret

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ABSTRACT

Background: Cervical cancer is one of the most common cancers affecting women and ranks fourth worldwide. During the course of treatment, cervical cancer patients in Indonesia often face various challenges that may affect their quality of life and treatment outcomes. Some of the main challenges experienced by cervical cancer patients include physical, psychological, social, and economic aspects. This study aimed to explore the experiences of cervical cancer patients while undergoing treatment.

Subjects and Method: This was a qualitative study with a phenomenological approach. The study was conducted at Dr. Moewardi Regional General Hospital, Surakarta, Central Java, particularly in the Obstetrics and Gynecology Outpatient Clinic. A total of 20 informants, consisting of 1 key informant, 10 main informants, and 9 supporting informants, were selected using purposive sampling. Data were collected through interviews, observations, and documentation. Data were analyzed using the Miles and Huberman approach.

Results: The study identified five themes: (1) the emotional journey of cervical cancer patients during treatment, (2) physical challenges experienced during cervical cancer treatment, (3) socio-economic barriers to undergoing cervical cancer treatment, (4) the role of social and spiritual support in patient resilience, and (5) the benefits of and expectations toward cervical cancer treatment.

Conclusion: The perceptions of cervical cancer patients during treatment were not limited to medical aspects alone but also encompassed emotional, social, spiritual, and economic dimensions. Addressing these aspects is essential for improving patients' quality of life and enhancing adherence to cervical cancer treatment.

Keywords: patient perceptions, cervical cancer, phenomenology.

Correspondence:

Eti Poncorini Pamungkasari. Public Health Department, Faculty of Medicine, Universitas Sebelas Maret. Jl. Ir Sutami No. 36A, Surakarta, Central Java, 57126. Email: etiponco@staff.uns.ac.id.

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BACKGROUND

Cervical cancer is one of the most common cancers affecting women and ranks fourth worldwide. Based on GLOBOCAN 2020 data, an estimated 36,633 new cases of cervical cancer and 21,003 deaths were reported in Indonesia (WHO, 2020). This indicates that more than 57% of cervical cancer cases resulted in death. The World Health Organization (WHO) estimated that, of the 342,000 deaths caused by cervical cancer in 2022, approximately 90% occurred in low- and middle-income countries. Cervical cancer remains the leading cause of cancer-related mortality among women in Sub-Saharan Africa, Central America, Central Asia, South Asia, and Melanesia. China and India contribute more than one-third of global cervical cancer cases, with approximately 106,000 and 97,000 cases, respectively (Arbyn et al., 2020).

In developing countries, cervical cancer is one of the leading causes of death among women due to limited health care resources (Syatriani, 2011; Morita et al., 2016). A study conducted by Puspita et al. (2023) reported that cervical cancer ranks second after breast cancer among all cancer types in Indonesia. In 2020, approximately 36,000 new cases and 21,000 deaths were attributed to cervical cancer in the country.

Cervical cancer remains a major public health problem in Indonesia. To control this disease, the government has implemented an early detection program using the Visual Inspection with Acetic Acid (VIA) method. In Central Java Province, the number of women of reproductive age (30–50 years) reached 5,978,972 in 2023. Between 2021 and 2023, only 227,928 women underwent cervical cancer screening, representing a coverage rate of 3.8%. Among women who received VIA testing, 19,639 (8.6%) were found to be

VIA-positive. This proportion exceeded the expected positive detection rate of 3–5% among screened women (Central Java Provincial Health Office, 2024).

Based on patient reports classified according to the International Classification of Diseases (ICD) at Dr. Moewardi Hospital, the number of cervical cancer patients undergoing treatment during the past five years fluctuated considerably. The highest number of treatment cases was recorded in 2023, reaching 13,007 cases. In 2024, the number declined to 10,864 cases (Dr. Moewardi Hospital, 2024).

During the treatment process, cervical cancer patients in Indonesia often encounter various challenges that may affect their quality of life and treatment outcomes. These challenges include physical, psychological, social, and economic aspects. Patients with cervical cancer face multiple difficulties while undergoing treatment, including physical, psychological, social, and spiritual challenges (Lestari et al., 2020; Sinaga et al., 2020; Distinarista et al., 2021).

The physical challenges commonly experienced by cervical cancer patients during treatment include treatment-related side effects such as nausea, vomiting, weight loss, and hair loss (Christiyanty et al., 2021). Psychologically, patients often experience emotional changes, anxiety, and uncertainty about the future (Sinaga et al., 2020; Distinarista et al., 2021). Such anxiety is frequently exacerbated by the social stigma associated with the disease, particularly among patients from lower socioeconomic backgrounds who face difficulties in obtaining information and support (Hadisiwi and Arifin, 2018). In addition, patients encounter social and spiritual problems (Sinaga et al., 2020). Family support and the social environment also play important roles in shaping

patients' perceptions and quality of life (Kusumaningrum et al., 2016; Sulistyawati et al., 2022).

Understanding the perceptions of cervical cancer patients can assist health professionals in providing holistic and patient-centered care. Patients' perceptions regarding disease severity and the importance of early detection influence their health-seeking behavior and participation in screening programs (Maurida et al., 2019; Apriany and Martha, 2023). Understanding the role of social support may also contribute to the development of interventions aimed at improving patients' quality of life. Furthermore, such information may contribute to the advancement of knowledge in oncology and cervical cancer epidemiology. Several risk factors have been identified in previous studies, including parity, age, and clinical stage of the disease (Hidayat et al., 2014; Handayani, 2019; Sirati et al., 2023).

Overall, the phenomenon explored in this study is the perception of cervical cancer patients while undergoing treatment, taking into account the various factors that influence these perceptions, including physical, psychological, social, and economic aspects.

SUBJECTS AND METHOD

1. Study Design

This study employed a qualitative research design using a phenomenological approach to explore patients' perceptions regarding the physical, psychological, social, and economic aspects of undergoing cervical cancer treatment at Dr. Moewardi Regional General Hospital, Surakarta, Central Java, Indonesia.

2. Study Informants

Informants were selected using purposive sampling. A total of 20 informants participated in the study, consisting of 1 key

informant, 10 main informants, and 9 supporting informants. The key informant was a healthcare professional (physician) at Dr. Moewardi Regional General Hospital who was responsible for managing cervical cancer patients. The main informants were cervical cancer patients undergoing treatment at the hospital, while the supporting informants were family members, relatives, or neighbors who accompanied or cared for the patients during their treatment.

3. Operational Definition of Variables

Patients' perceptions of cervical cancer treatment The subjective views and evaluations of cervical cancer patients regarding the treatment they undergo, including their physical, social, psychological, and economic experiences during treatment at Dr. Moewardi Regional General Hospital.

Treatment experience The actual experiences perceived by patients throughout the cervical cancer treatment process, including the challenges and benefits encountered during treatment.

Treatment expectations and meaning

Patients' expectations regarding treatment outcomes and the meaning of treatment for their lives and future.

4. Study Instruments

Data were collected through documentation, observation, and in-depth interviews. Data analysis was conducted through data reduction, narrative presentation, and thematic conclusion development

5. Data Analysis

Data were analyzed using the Miles and Huberman qualitative analysis method. The analysis began with the preparation of verbatim interview transcripts. The data were then reduced by filtering relevant information, while information unrelated to the study focus was excluded. Subsequently, coding was performed to identify data segments representing specific the-

mes, such as “physical aspects,” “social aspects,” “spiritual aspects,” and “economic aspects.” These codes were grouped into broader categories, which were then organized into the main study themes, including the emotional journey of cervical cancer patients during treatment, physical challenges during cervical cancer treatment, socio-economic barriers to treatment, the role of social and spiritual support in patient resilience, and the benefits of and expectations toward cervical cancer treatment.

5. Research Ethics

Research ethics issues, including informed consent, anonymity, and confidentiality, were carefully addressed throughout the study process. Ethical approval was obtained from the Research Ethics Committee of Dr. Moewardi Hospital, Surakarta, Central Java, Indonesia (Approval No. 292/II/HERC/2025), dated February 12, 2025.

RESULTS

1. Sample Characteristics

a. Key Informants

The study included one key informant, a physician working at Dr. Moewardi Hospital who was responsible for managing cervical cancer patients undergoing treatment. The key informant, identified as Dr. S, was an obstetrician and gynecologic oncologist involved in the treatment of cervical cancer patients. Dr. S was selected as the key informant due to professional competence, authority in medical decision-making, and comprehensive knowledge of the service pathways, policies, and management of cervical cancer treatment. Information obtained from the key informant provided an overview of the treatment system, standards of care, and clinical context necessary for understanding the experiences of cervical cancer patients.

b. Main Informants

The main informants in this study consisted of 10 cervical cancer patients who were undergoing treatment at Dr. Moewardi Hospital. Based on age characteristics, the informants ranged from 43 to 70 years old, with the majority being over 50 years of age. This finding indicates that cervical cancer in this study predominantly affected middle-aged and older women, which may influence their perceptions, interpretations of illness, and responses to treatment.

In terms of educational attainment, most main informants had completed elementary school or junior high school, while only one informant had completed senior high school. This relatively low level of education may affect patients' understanding of cervical cancer, the treatment process, and their ability to receive and interpret medical information provided by healthcare professionals.

Regarding occupation, the majority of informants were housewives and farmers, while a smaller proportion worked in the private sector or were self-employed. These occupational backgrounds reflect the socio-economic conditions of the informants, which may influence their emotional experiences, family support, and access to healthcare services during treatment.

Based on disease stage, the main informants were diagnosed with stage IIB, IIIA, IIIB, and IVA cervical cancer, with most patients presenting at advanced stages (IIB and IIIB). The predominance of advanced-stage disease indicates that most informants required intensive medical management, making their treatment experiences more complex and psychologically and physically meaningful.

The duration of treatment varied from two months to two years. Treatment modalities included chemotherapy and follow-up monitoring. This variation in

treatment duration and type reflects the diversity of patients' lived experiences in coping with cervical cancer, including their

perceptions of treatment effectiveness, treatment-related side effects, and expectations for recovery.

Table 1. Characteristics of Main Informants

Code	Age (Years)	Education Level	Occupation	Cancer Stage	Duration of Treatment	Treatment Phase
I1	64	Junior High School	Housewife	IIB	6 months	Chemotherapy
I2	52	Elementary School	Housewife	IVA	4 months	Chemotherapy
I3	50	Junior High School	Housewife	IIB	5 months	Chemotherapy
I4	56	Elementary School	Farmer	IIIB	1 year	Follow-up Monitoring
I5	64	Elementary School	Farmer	IIB	2 months	Chemotherapy
I6	61	Elementary School	Private Employee	IIIB	5 months	Chemotherapy
I7	70	Elementary School	Farmer	IIIA	2 years	Follow-up Monitoring
I8	43	Elementary School	Housewife	IIB	1 year	Chemotherapy
I9	59	Senior High School	Housewife	IIB	<1 year	Follow-up Monitoring
I10	55	Elementary School	Self-employed	IIB	<1 year	Follow-up Monitoring

c. Supporting Informants

The supporting informants in this study consisted of nine individuals who were family members, relatives, or neighbors accompanying cervical cancer patients throughout their treatment process. These informants were selected because they were able to provide additional perspectives regarding the patients' conditions, the support provided—both material and non-

material—and the patients' interactions with their social environment and health-care services.

Information obtained from the supporting informants served to complement and validate the data collected from the main informants through source triangulation, thereby enhancing the credibility and depth of the study findings.

Table 2. Demographic Characteristics of Supporting Informants

Code	Age (Years)	Relationship to Patient	Occupation
I12	64	Neighbor	Housewife
I13	24	Child	Private Employee
I14	50	Relative	Housewife
I15	35	Child	Self-employed
I16	25	Child	Housewife

Code	Age (Years)	Relationship to Patient	Occupation
I17	35	Son/Daughter-in-law	Private Employee
I18	21	Grandchild	Self-employed
I19	70	Husband	Retired
I20	55	Husband	Farmer

2. Theme 1: The Emotional Journey of Cervical Cancer Patients During Treatment

This theme consisted of two main categories: negative psychological reactions and positive psychological reactions. These categories reflect the emotional experiences of patients throughout the cervical cancer treatment process.

a. Negative Psychological Reactions

This category describes the negative emotions experienced by patients during treatment, including treatment refusal, lack of self-confidence, stress, and fatigue due to the lengthy treatment process. These experiences were reflected in the following statements:

- “What if I never recover...?” (I2)
- “At first, I was stressed when I started treatment...” (I3)
- “...I had not undergone radiotherapy yet, so I only came back later for treatment.” (I1)

Treatment refusal was also reported by a family member:

“The patient had stopped treatment for a while. Dr. A recommended chemotherapy and radiotherapy, but the patient was afraid and decided to stop...” (I12)

The psychological responses of patients varied considerably, indicating that negative emotional reactions often require support from family members, relatives, and neighbors.

This finding was supported by the statement of Dr. S:

“...Family support, encouragement from relatives, and motivation from healthcare providers are very important because receiving a cancer diagnosis is not easy. Many people perceive cancer as frightening and fatal. Even treatment in advanced stages often relies on chemotherapy, and chemotherapy itself cannot guarantee complete elimination of cancer because outcomes depend greatly on each patient’s immune response...” (Dr. S)

Because cervical cancer treatment requires a relatively long period of time, patients often experience exhaustion and boredom during treatment.

“Sometimes I feel bored and tired because the process is so long...” (I8)

Dr. S also highlighted the prolonged nature of treatment:

“...The chemotherapy process is long. Even after responding well to treatment, patients must continue follow-up visits. Initially, they come every month for six visits, then every three months, followed by every six months, and eventually once a year. These follow-ups continue for life...” (Dr. S)

b. Positive Psychological Reactions

This category describes positive emotions that emerged during treatment, including self-motivation and maintaining a positive outlook.

Patients attempted to strengthen themselves and remain optimistic

throughout the treatment process, as illustrated by the following statements:

"...I have to be strong; I have to recover." (I10)

"...I must always think positively." (I5)

Family members also acknowledged the patients' positive attitudes:

"Mother is very enthusiastic about undergoing treatment." (I20)

3. Theme 2: Physical Challenges During Cervical Cancer Treatment

This theme consisted of one main category, namely treatment-related impacts. Patients reported experiencing a variety of treatment side effects, including weight loss, reduced appetite, dizziness, hair loss, body pain, nausea, and vomiting.

Both chemotherapy and radiotherapy were described as causing substantial physical burdens. Informants reported physiological changes following treatment, including weight loss, nausea, vomiting, dizziness, body pain, and hair loss.

"My weight decreased after undergoing chemotherapy..." (I5)

"After radiotherapy, I felt nauseous, dizzy, and almost vomited. Now my hair is falling out because of chemotherapy..." (I6)

"At the beginning of radiotherapy, I really suffered. I had never experienced abdominal pain that severe before..." (I10)

Healthcare providers also confirmed these physical challenges:

"...Chemotherapy has many side effects, such as weakness, nausea, vomiting, and loss of appetite. Sometimes patients want to stop chemotherapy because the side effects are very disturbing and physically exhausting..." (Dr. S)

4. Theme 3: Socio-Economic Barriers to Undergoing Cervical Cancer Treatment

This theme consisted of two categories: barriers to healthcare access and unsupportive social environments.

a. Barriers to Healthcare Access

Although treatment costs were covered through the national health insurance program (BPJS), transportation expenses, long travel distances, and daily living costs during treatment remained significant burdens for patients and their families.

"The treatment is free, but the hospital is far away. It is about 30 kilometers from my home..." (I1)

"The examinations and treatment are free, but it takes two hours to reach the hospital. We even had to borrow money for transportation..." (I5)

"Even though I use BPJS, the travel expenses are expensive because I live in Blora..." (I8)

"The treatment is free through BPJS, but I still have to pay daily living expenses because I have to rent a room near the hospital..." (I7)

Family members reported similar concerns:

"Transportation costs are expensive. Hiring a car costs around 500,000 rupiah for a round trip, not including meals. Sometimes we have to stay overnight in a boarding house..." (I16)

"The transportation costs back and forth are what feel most burdensome." (I20)

b. Unsupportive Social Environment

In addition to financial and healthcare access barriers, some patients experienced negative social responses from their communities.

"...Some neighbors tried to discourage me, but I chose not to listen..." (I5)

"...The environment made me feel down. No one came to visit because they thought the disease was contagious. At one point, I was avoided by my neighbors..." (I8)

5. Theme 4: The Role of Social and Spiritual Support in Patient Resilience

This theme consisted of two categories: supporting factors and spiritual coping strategies.

a. Supporting Factors

Social support from family members and the surrounding community was identified as a crucial factor in helping patients cope with treatment. Support included emotional encouragement, practical assistance, financial support, and motivation.

"My mother, husband, and children always support me. My husband accompanies me to every treatment session..." (I8)

"My husband and children often accompany me to the hospital. Relatives also help cover treatment expenses..." (I10)

"Neighbors lent us a car and even paid for fuel so we could go to the hospital..." (I1)

"The healthcare staff were very supportive. They always encouraged me to stay strong..." (I5)

Family members expressed similar views:

"We have to support her positively and keep motivating her." (I17)

"I set aside money for transportation and living expenses during each chemotherapy cycle..." (I19)

"Many relatives helped financially with treatment-related needs..." (I13)

Healthcare providers also emphasized the importance of encouragement:

"For cancer patients, we always provide support and motivation. We hope that treatment such as chemotherapy or surgery can prevent the cancer from spreading further..." (Dr. S)

b. Spiritual Coping Strategies

Receiving a cervical cancer diagnosis and undergoing treatment was described as a difficult experience. Patients adopted various coping strategies to maintain physical and emotional balance, with spirituality emerging as a major source of strength.

"I pray to recover quickly and continuously ask God for help..." (I2)

"I recite dhikr. Whenever I feel discouraged, I remember Allah..." (I3)

"I only pray for a speedy recovery. Every night I perform Tahajjud prayer..." (I9)

"I pray to Allah for guidance, support, and strength..." (I10)

Family members also highlighted the importance of spirituality:

"Religious practices should be increased, including regular prayers and worship..." (I16)

6. Theme 5: Benefits of and Expectations Toward Cervical Cancer Treatment

This theme consisted of two categories: perceived benefits of treatment and patients' expectations during treatment.

a. Benefits of Cervical Cancer Treatment

Patients described noticeable improvements in their condition after receiving treatment, including reduced or absent bleeding and weight gain.

"After taking the medication prescribed by the doctor, my bleeding gradually decreased..." (I1)

"I am getting better now and no longer experience bleeding..." (I7)

"When I was first admitted to the hospital, I was thin and weak. Alhamdulillah, there have been many improvements. My weight increased from 37 kg to 43 kg after treatment..." (I2)

Patients also reported renewed optimism and motivation:

"I am confident that I will recover. The care here is excellent..." (I2)

"As treatment progresses, things keep getting better. My negative thoughts are gradually disappearing..." (I8)

Other benefits included positive lifestyle changes:

"I now follow a healthier lifestyle, strengthen my faith, attend religious gatherings, and carry out daily activities again..." (I4)

b. Expectations of Cervical Cancer Patients

Patients expressed hopes for a better quality of life and a return to normal daily functioning.

"My hope is to return to the way I was before becoming ill and be able to carry out my usual activities..." (I2)

"I want this disease to disappear completely. I want to return to my normal routine..." (I10)

DISCUSSION

1. The Emotional Journey of Patients During Treatment

The experiences of cervical cancer patients reflect not only efforts to cope with the physical consequences of the disease but also complex psychological dynamics thro-

ughout the treatment process. Patients undergoing cervical cancer chemotherapy for the first time generally experience multiple emotional reactions simultaneously, including fear, denial, sadness, stress, and loss of self-confidence regarding their condition. This finding is consistent with the study by Akbulak and Can (2023), which reported that many cancer patients receiving chemotherapy for the first time experience anxiety and stress related to the potential adverse effects of treatment.

Similarly, Rio et al. (2017) reported that women with family members diagnosed with cervical cancer perceived not only financial burdens but also non-material burdens, including fear, worry, depression, and various forms of social stigma. Such stigma includes beliefs that women with cervical cancer have multiple sexual partners, are cursed, or are experiencing karma, all of which may negatively affect women diagnosed with cervical cancer.

The treatment journey of cervical cancer patients undergoing chemotherapy was predominantly characterized by negative emotional responses. Patients who had undergone repeated chemotherapy sessions tended to experience chronic emotional exhaustion, boredom, and depressive symptoms resulting from the prolonged treatment duration and substantial physical and psychological demands. Nevertheless, some patients demonstrated adaptation to both the disease and treatment process. In contrast, patients who had recently initiated treatment or were in the follow-up phase more frequently experienced anxiety, fear of disease uncertainty, and strong hope for survival, although positive emotions had not yet fully developed. These emotional responses were influenced by treatment-related side effects experienced throughout therapy.

To cope with these challenges, patients attempted to motivate themselves and maintain positive thinking. This finding is consistent with Kolin et al. (2016), who reported that cervical cancer patients need to cultivate positive thoughts about themselves and their illness, although this is not an easy process. Therefore, adaptive capacity and strong motivation to recover are important factors influencing the healing process, particularly among patients who adhere to treatment recommendations (Agustina et al., 2020). Cervical cancer patients who receive greater emotional and instrumental support tend to have more positive perceptions of their treatment. Such support also helps patients cope with psychological stress associated with the diagnosis and treatment of cervical cancer (Dirar et al., 2022).

2. Physical Challenges During Cervical Cancer Treatment

Treatment for cervical cancer may involve surgery, chemotherapy, and radiotherapy. These treatment modalities often impose significant physical challenges on patients. Participants reported various physical difficulties during treatment, including weight loss, nausea, vomiting, dizziness, body pain, reduced physical strength, and hair loss. These challenges may negatively affect patients' quality of life and their ability to perform daily activities. This finding is consistent with Joe and Darmayasa (2019), who reported that cervical cancer patients experienced substantial reductions in physical activity due to mild, moderate, and severe treatment-related side effects, resulting in prolonged periods of bed rest.

Treatment side effects are common among cervical cancer patients. Hair loss, for example, is a well-known consequence of chemotherapy drugs administered during treatment (Naveed et al., 2019).

Patients receiving chemotherapy frequently experience gastrointestinal motility dysfunction, including weight loss, reduced appetite, nausea, and vomiting. Consequently, many patients experience significant weight loss and decreased interest in food (Christiyanty et al., 2021).

Reduced physical health-related quality of life may result from pain and discomfort caused by treatment side effects. Radiotherapy, which uses X-rays to destroy cancer cells, may also generate adverse effects that affect patients' physical comfort (Nurhayati et al., 2019). Furthermore, cervical cancer patients undergoing chemotherapy and radiotherapy often experience reductions in blood cell counts accompanied by more severe fatigue and nausea (Valentina et al., 2024).

3. Socio-Economic Barriers to Cervical Cancer Treatment

Although cervical cancer treatment is covered through Indonesia's National Health Insurance Program (BPJS), participants still experienced substantial social and economic burdens that limited their ability to undergo treatment optimally. Socio-economic factors such as financial constraints, low educational attainment, long distances to healthcare facilities, and social stigma were identified as major barriers affecting treatment continuity and therapeutic outcomes.

The economic burden associated with cervical cancer is an important factor influencing how patients evaluate and make decisions regarding treatment. Cervical cancer treatment often requires substantial financial resources. Patients with lower incomes are more likely to experience greater financial strain, which may influence their perceptions and treatment decisions. Place of residence also plays an important role. Patients living in rural areas frequently encounter greater difficulties in

accessing treatment services compared with those residing in urban areas (Luo et al., 2021).

Many patients possess limited knowledge regarding cervical cancer and its symptoms, which may delay healthcare-seeking behavior. Even among those with some awareness of the disease, delays in obtaining appropriate treatment may still occur (Kabalimu et al., 2018). Cervical cancer treatment is often costly, and inadequate economic resources may limit access to treatment. In addition, mortality may occur because many patients are diagnosed at advanced stages when available treatments are less effective in controlling disease progression (Girsang et al., 2021).

Participants also experienced negative judgments from their social environment, including social avoidance and lack of visits from neighbors during illness. Such experiences may negatively affect patients' health and well-being. Mort et al. (2011) reported that individuals with cancer often experience fatigue, difficulties in social relationships, anxiety, and other forms of psychological distress that may further worsen physical health. Conversely, some patients transformed negative societal judgments into motivation to recover and demonstrate their ability to overcome cervical cancer (Atika and Nurfitria, 2024).

4. The Role of Social Support and Spiritual Coping in Patient Resilience

Throughout the long and challenging treatment journey, cervical cancer patients require more than medical care alone. Social support from family members, friends, healthcare providers, and the surrounding community, together with spiritual strength, may reinforce motivation, reduce stress, and facilitate adaptation during treatment.

Family support emerged as a primary source of encouragement for patients. Such support included financial assistance, transportation to healthcare facilities, emotional encouragement, and companionship during periods of illness (Ratna et al., 2022). Participants also expressed the need for support from the wider community, particularly the absence of negative stigma related to their illness (Ambarwati, 2017). Similarly, support provided by healthcare professionals through nursing care and patient counseling constitutes an important source of support during chemotherapy and other cancer treatments (Kardiyudiadi, 2012).

Several factors were identified as helping patients remain resilient, including maintaining hope, practicing gratitude, and strengthening their relationship with God, which encouraged positive thinking toward themselves and their lives (Diyella et al., 2021). Participants also viewed their experiences as sources of motivation to continue fighting the disease and sought spiritual comfort through prayer and religious practices, enabling them to maintain meaningful lives despite living with a chronic illness (Atika and Nurfitria, 2024).

5. Benefits of and Expectations Toward Cervical Cancer Treatment

Optimism and resilience among patients undergoing chemotherapy were influenced by perceived treatment benefits, support from family members, relatives, friends, neighbors, and healthcare providers, coping mechanisms, spiritual beliefs, economic conditions, and patient knowledge. These factors contributed to maintaining patients' commitment to treatment despite severe treatment side effects and financial burdens.

Participants reported several benefits from treatment, including gradual

improvements in physical condition characterized by reduced or absent vaginal bleeding, weight gain, and renewed enthusiasm for life. These findings are supported by Sarkar (2009), who reported significant improvements in physical, emotional, and cognitive functioning among cervical cancer patients undergoing treatment, accompanied by reductions in fatigue, pain, insomnia, appetite loss, and constipation, although financial difficulties remained prevalent.

Because cervical cancer treatment is lengthy and demanding, patients are required to remain patient and optimistic despite treatment-related side effects. Increased self-confidence and hope for the future were evident among patients undergoing radiotherapy despite experiencing considerable physical and psychological distress (Li et al., 2017). Optimistic patients are more capable of reducing psychological stress, thereby fostering positive treatment perceptions and potentially enhancing immune system functioning (Iwanaga et al., 2024).

Zhu et al. (2025) reported that cervical cancer patients were willing to allocate greater financial resources to avoid reductions in quality of life, as demonstrated by higher willingness-to-pay values for interventions that improved quality of life compared with those that merely prolonged survival. During the early and middle phases of treatment, cervical cancer substantially affects patients' quality of life, with patients in stages I–II reporting higher quality-of-life scores than those in stages III–IV (Barbu et al., 2025).

AUTHOR CONTRIBUTIONS

La Karman Gojali contributed to study conceptualization and design, data collection, data analysis and interpretation, and manuscript preparation. Eti Poncorini

Pamungkasari, Bhisma Murti, and Haryani Saptaningtyas contributed to study conceptualization, research design, data analysis, and manuscript preparation. Argyo Demartoto and Revi Gama Hatta Novika contributed to data analysis and manuscript preparation.

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CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest related to this study.

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