

# Symptom Management and Nursing Care in Palliative Care of Cervical Cancer Patients

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## Abstract

Cervical cancer is a preventable and treatable gynecological cancer, which ranks fourth among cancers seen in women worldwide and tenth in our country, and can usually be detected in advanced stages of the disease. In advanced stages, some problems, including particular organs and systems, such as pain, vaginal secretion, fistula, vaginal bleeding, diarrhea, constipation, edema in legs, and air hunger in the patient can emerge as a result of both the disease itself and the organs it has spread in and chemotherapy, radiotherapy, or chemo-radiotherapy applied to the patient for medical purpose. It is not possible to control all of these problems with medical treatment. This situation requires palliative care in the effective management of the disease. Palliative care in cervical cancer is provided by a multidisciplinary team, and the nurse is a significant member of this team. A nurse fulfills several roles and responsibilities including symptom management in palliative care of cervical cancers, fulfillment of a honorable death, and supporting the family during the mourning period. Thus, in this compilation, nursing practices related to symptom management in palliative care of cervical cancer patients and the end-of-life period will be discussed.

**Keywords:** Cervical cancer, nursing, care, palliative.

## Introduction

Cervical cancer is the uncontrolled division and proliferation of cervical cells and tissues.<sup>1</sup> This cancer is the fourth most common type of cancer in women, with 570 000 cases and 311 000 deaths, according to 2018 data worldwide.<sup>2</sup> It ranks 10th among the most common cancers in women in Turkey.<sup>3</sup> Although cervical cancers have high mortality rates in women, they are preventable and treatable cancers with a preinvasive process that can last for years, which will allow for diagnosis and effective treatment before it turns into invasive cancer.<sup>1</sup> There are effective methods such as pap smear, colposcopy, and biopsy in the diagnosis of cervical cancer. The treatment of cancer detected through these methods is carried out according to the stage and general health status of the patient. In the treatment, cryotherapy, laser surgery, and excision with electrosurgery can be performed for patients in the preinvasive period. In invasive cervical cancer cases, on the other hand, hysterectomy, radiotherapy, chemotherapy, pelvic extrusion surgery, or combined methods including both surgery and chemo-radiotherapy can be used in the treatment.<sup>4</sup>

The reasons such as the fact that cervical cancer does not show symptoms in the preinvasive period and women do not have regular pap smear and gynecological examinations or cannot reach these examinations for social and economic reasons cause the diagnosis of cervical cancer in the advanced stages of the disease and after symptoms appear in the world and in our country.<sup>1,5,6</sup>

Many problems such as pain, vaginal discharge, vaginal bleeding, nausea, vomiting, edema, shortness of breath, and pressure ulcers may occur due to both the disease itself and its treatment in patients with advanced cervical cancer in whom the chance of curative treatment is lost. At this stage, only medical treatment is not sufficient to control the problems and provide holistic care to the patients and their families, and palliative care is also required to both control the problems and increase the patient's quality of life and provide the necessary care and support to the patients and their families.<sup>1,7</sup>

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Palliative care is a term used to relieve or eliminate symptoms. It is derived from the Latin term “palliare” and the English term “palliate” and means to cover, remove, or relieve.<sup>8</sup> The World Health Organization (WHO) provides palliative care for patients and their families facing life-threatening diseases; it defines it as an approach to improve the quality of life through the early and perfect evaluation of pain and other problems, and the alleviation and prevention of pain by meeting physical, psychosocial, and spiritual needs.<sup>9</sup> Palliative care considers life and death as a normal process and offers the necessary help for the patient to live as actively as possible until death. It also provides the family with the necessary support system to cope with the patient’s illness and loss.<sup>1,9,10</sup>

Palliative care is usually provided by a multidisciplinary team that includes doctors, nurses, psychologists, chaplains, physical therapists, pharmacists, occupational therapists, dietitians, and social workers.<sup>1,10</sup> The nurse is an important member of the palliative team, at the point of improving the patient’s quality of life and preventing symptoms; the nurse takes responsibility in many areas such as providing care in line with the needs of the patient, providing effective communication, and providing education to the patient and family.<sup>11</sup> In this direction, nurses in the palliative care process<sup>12</sup>

- provide ongoing emotional support to the patient and family;
- provide assistance in assessing and coping with the patient’s pain and other symptoms;
- inform the patient and family about the control of symptoms at home;
- provide the necessary information for the patients and their families to reach the emergency services;
- enable the patient to fulfill their daily needs at the highest level possible and increase their quality of life.
- provide support to the patient and family in many areas such as determining the support systems of the patient and their families regarding the process and ensuring that they receive support.

Considering the necessity of providing palliative care in cases in which there is no chance of curative treatment in cervical cancer and the active role and responsibilities of nurses in palliative care, this section will include nursing practices related to symptom management and end-of-life care in patients.

### Problem and Symptom Management

Cancer treatments mainly focus on prolonging the patient’s life and preventing the recurrence of the disease. As a result, the symptoms and problems experienced by the woman depending on the disease and the treatment process can be ignored. However, controlling the problems and symptoms is important in terms of increasing the quality of life in gynecological cancers.<sup>13</sup> The most common symptoms and problems related to the treatment process and disease in cervical cancers are pain, vaginal discharge, fistula, vaginal bleeding, nausea, vomiting, diarrhea, constipation, loss of appetite, weakness, fatigue, leg edema, pressure ulcers, shortness of breath, stress, anxiety, depression, and sexual dysfunction.<sup>1,7,14</sup> These problems and symptoms should be handled by nurses, and they should provide effective management and care. Nursing interventions for these symptoms are given in the subsequent sections.

### Pain

Pain is a common symptom in advanced cancer patients, and its severity and incidence increase in the advanced stages of the disease. Patients with cervical cancer may also experience moderate or severe pain.<sup>1</sup> In a study, women with advanced cervical cancer who applied to the palliative care service were evaluated, and it was reported that 92% of the women experienced pain.<sup>15</sup> In order to provide an effective pain management, the nurse should evaluate pain, which is a subjective concept and can be affected by emotional situations. In the evaluation of pain, scales such as visual analog scale, numerical scale, McGill or short pain assessment form can be used.<sup>16</sup> A multimodal approach can be applied in the management of detected pain. This approach includes the combined use of drugs (opioid, non-opioid, and sedative), non-pharmacological administration, and special techniques to provide better analgesia.<sup>17</sup> In this approach, the nurse can take an active role in the non-pharmacological management of pain. For this, the nurse<sup>18</sup>

- enables the individual to distract himself/herself from the pain, to focus on a situation other than pain, to daydream during pain, and to draw attention to different areas;
- provides interaction between mind–body–behavior and enables the patient to practice meditation and yoga to reduce pain;
- helps the patient in performing alternative treatment applications such as massage and aromatherapy massage in order to stimulate some parts of the body and reduce pain.

### Vaginal Discharge

Women with cervical cancer may have a watery, light yellow, bloody, or foul-smelling vaginal discharge. Vaginal discharge consists of blood, inflammation, tissue, urine, feces, or a combination of these.<sup>7</sup> In a study, it was reported that 61% of women with advanced cervical cancer who applied to the palliative care service experienced vaginal discharge.<sup>15</sup> Radiotherapy as a medical treatment can be applied as an effective approach in controlling vaginal discharge. The applied radiotherapy has the feature of reducing the tumor as well as controlling the vaginal discharge. However, the symptom of vaginal discharge cannot be completely controlled with radiotherapy.<sup>7,19</sup> In such cases or in conjunction with radiotherapy applications, in order to ensure the patient’s comfort at the highest possible level, the nurse<sup>1</sup>

- should make a sitz bath with warm water in order to make the patient feel clean;
- should cover the bed with plastic sheets to keep it clean and ensure that the sheets are changed frequently or cleaned with chlorinated water;
- should inform the patient and their relatives that the area should be dried after the bath in order to prevent the area from getting irritated, protecting the skin of the vagina and anus, applying zinc oxide to the area, and that these precautions should be taken as a preventative without the area being irritated;
- should ventilate the room to reduce the sense of bad smell, if the environment is suitable.
- should provide frequent changing of underwear, pads, and tampons against infection and odor formation.

- should advise the patient to douche with a mixture containing one of the following ingredients prepared with warm boiled water at home: 1 tablespoon of sodium bicarbonate in 2 glasses of water,
- ½ cup of vinegar in 2 cups of water,
- Mixtures can be formed by adding 5-10 tablets of metronidazole to 2 glasses of water.
- should explain to the patient and family that tampons should be applied to the vagina twice a day, from these solutions prepared for vaginal douching, but that the applied tampon should not be left in the vagina for more than a few hours.

### Fistula

The risk of vesicovaginal and rectovaginal fistula development is high in stage IVA cases in which cervical cancer invades the bladder and rectum.<sup>20,21</sup> In a study, it was reported that 44% of 25 women with stage IVA cervix developed fistula during the course of the disease.<sup>21</sup> In these cases, surgical treatment is generally not preferred due to the advanced stage of the cancer, insufficient vascularization and tissue repair, and the failure of surgery to give successful results. In these cases, the woman should be made to feel as clean and comfortable as possible.<sup>7,20</sup> Nurse for this<sup>7</sup>:

- provides the application of tampons with clean and absorbent cloths into the underwear of the woman to ensure the absorption of vaginal discharge and to keep the area dry;
- covers the mattress with a plastic sheet to prevent leakage and contamination to the mattress; and
- ensures that the area is kept dry, zinc oxide and petroleum jelly are applied to protect the area, if the skin around the vagina and anus begins to turn red.

### Vaginal Bleeding

The prevalence of vaginal bleeding in patients with advanced cervical cancer ranges from 0.07% to 100%. This symptom usually causes sudden death in 6% of patients, and it is often difficult to control. Management of the problem can be achieved with applications such as interventional radiology, radiotherapy, tranexamic acid, and vaginal tampons.<sup>22</sup> In the management of this problem, the nurse<sup>1,23</sup>

- applies direct pressure to the area with a vaginal tampon to control bleeding;
- monitors bleeding in terms of possible bleeding; and
- provides communication with the team, in cases where the bleeding reaches serious levels, and provides blood transfusion to the patient in order to alleviate the symptoms and increase the quality of life.

### Nausea-Vomiting

Nausea and vomiting are the common symptoms in cancer patients during the treatment process. These symptoms can be seen in 40%-80% of patients.<sup>24</sup> In a study, it was reported that 39% of women with advanced cervical cancer experienced nausea and vomiting.<sup>25</sup> This symptom occurs in patients for various reasons such as the disease itself, its treatment, obstruction, infection, and mental state.<sup>26</sup> In a study, it was reported that nausea-vomiting was seen to be moderate in patients with cervical cancer receiving chemotherapy, but more severe nausea-vomiting was reported in patients with higher anxiety scores.<sup>27</sup> It is important to determine the cause in controlling

the symptom, and the nurse should first take a detailed anamnesis. Then, the patient's comfort should be ensured by pharmacological and non-pharmacological methods.<sup>7,26,28</sup> In the pharmacological management of the symptom, taking into account the underlying factor, drugs such as promethazine, scopolamine, sedating antihistamine, benzodiazepine, and metoclopramide can be administered.<sup>7,26</sup> In addition, the nurse primarily applies non-pharmacological methods such as massage, music, relaxation exercises, acupuncture, and yoga in the management of this symptom in the patient.<sup>28</sup> In addition to non-pharmacological applications, patient education, and environmental regulation are also important. For this, the nurse<sup>29</sup>

- helps patients in consuming foods frequently and small snack during the day in order to increase the patient's tolerance instead of 3 main meals;
- ensures that the patient is eating a very light meal on chemotherapy and radiotherapy days before treatment to prevent nausea and vomiting;
- advises patients about preferring soft foods as it is prone to bleeding inside the mouth;
- advises the patient to consume food at room temperature or cold to alleviate the nausea and vomiting caused by the smell and taste of the food;
- advises patients to avoid fatty, fried, spicy, or very sweet foods because they are difficult to digest and will cause more nausea and vomiting;
- provides the protein need from other foods such as fish, chicken, beans since most people may develop an aversion to red meat during cancer treatment;
- ensures that the patient is sitting upright for at least an hour if possible and resting quietly after each meal to facilitate digestion; and
- provides training on the use of distracting elements such as a favorite music or television program while eating.

### Diarrhea

Diarrhea is a symptom characterized by an increase in the number and frequency of defecation. It is a common and important problem in advanced cancer patients. Severe diarrhea can sometimes reach dimensions that threaten the life of the person.<sup>7,13,18</sup> In a study conducted, it has been determined that diarrhea occurring after chemotherapy in patients with cervical cancer depends on the stage of the patient's disease, stress, and dietary factors, and it has been emphasized that education about a healthy diet is important for the control of diarrhea.<sup>30</sup> In order to control the diarrhea symptom in cervical cancer, the nurse should first determine the condition causing the symptom with a general evaluation. Then, individualized patient-centered care should be offered. In pharmacological treatment, drugs (loperamide, codeine, diphenoxylate, etc.) prescribed by the doctor are given to the patient.<sup>7,13</sup> Non-pharmacological management of the symptom is based on patient follow-up and education. For this, the nurse<sup>7,13</sup>

- evaluates the bowel habit of the individual in order to identify abnormal conditions;
- identifies the factors that cause diarrhea (chemotherapy, radiotherapy, anxiety, infection, etc.);
- closely monitors abdominal pain, fever, weakness, signs of dehydration, and fluid and electrolyte losses that may occur due to diarrhea;

- informs the patient to prefer light and easy-to-digest, pulp-free foods, and to avoid the consumption of extremely hot and cold foods as they may increase intestinal irritation and worsen the symptoms;
- encourages the patient to consume 10-12 glasses of fluid a day to ensure adequate hydration; and
- ensures that the patient eats less and frequent and avoids foods (fried foods, alcohol, caffeine, etc.) and drugs that can worsen diarrhea.

### Constipation

Constipation is a common symptom seen in approximately 60% of cancer patients. Especially in advanced stage cancer patients using opioid analgesics or anticholinergics, its incidence as a side effect of drug treatments is increasing. In order to prevent constipation or reduce complaints, the nurse should support the patient with pharmacological and non-pharmacological methods. In order to provide early diagnosis and control in the solution of the problem, the bowel habits of the patient should be evaluated continuously. In the pharmacological management of the symptom, the patient is given the drugs prescribed by the doctor (laxatives, rectal suppositories, enemas, etc.).<sup>7,31</sup>

For the effective management and prevention of the symptom with non-pharmacological methods, the nurse should give advice on life-style to the patient. Nurse for this<sup>31,32</sup>:

- increases daily fluid intake to ensure adequate hydration;
- prefers foods with high fiber content that increase bowel movements;
- avoids apples, peas, beans, milk, and carbonated drinks that may cause gas formation during the constipation process;
- avoids foods that may cause constipation, such as cheese and eggs; and
- provides education on the issues that increasing physical activity as tolerated by the person will be beneficial in symptom management.

### Fever

Fever is a common symptom that can occur in cancer patients without infection or with infection. In addition, it has been reported that the cause of fever is cancer in 15%-20% of patients with fever of unknown origin.<sup>33</sup> The cause of fever should be determined and brought under control, as fever is a stressor and causes fatigue in cancer patients and also complicates the treatment process.<sup>34</sup> There are pharmacological and non-pharmacological methods for symptom management. Paracetamol derivative drugs should be used in pharmacological treatment.<sup>7</sup> In non-pharmacological methods, the nurse<sup>7,35</sup>

- allows the patient to undress and remove their clothes in order to ensure heat loss and to get fresh air if necessary and possible;
- ensures that the patient's clothes are changed frequently and takes a warm shower to ensure the comfort of the patient and meets the hygiene requirements;
- ensures that the patient takes plenty of fluids for adequate hydration, as it will help in regulating body temperature;
- tells the normal values of body temperature in order to diagnose the risks in the education of the caregivers;
- advises patients to inform to apply to the health institution, in cases in which the patient has a fever, if the fever does not decrease within 48 hours, if there are other accompanying symptoms (persistent

headache, stiff neck, etc.), and if convulsions are observed, as it may indicate a serious problem.

### Appetite and Weight Loss

Loss of appetite and associated weight loss are common symptoms in cancer patients. One-third of the patients lose more than 5% of their pre-disease body weight, and nearly 20% of cancer deaths are caused by cachexia, which causes immobility, heart, and respiratory failure.<sup>36</sup> In a study evaluating 55 patients with advanced cervical cancer who received combined chemo-radiotherapy, it was reported that patients did not have malnutrition before treatment, but 69% of them had clinical malnutrition after treatment and they lost an average of 7.4 kg. The nutritional status of patients with cervical cancer worsens, especially with concomitant treatments, and adversely affects the clinical outcome of the patient.<sup>37</sup> In addition, loss of appetite causes weakness and fatigue in patients, so it is important for the nurse to support the patient with non-pharmacological and pharmacological methods in the management of the symptom. In pharmacological treatment, corticosteroid (prednisone or dexamethasone) derivative drugs can be given to the patient to increase appetite. In non-pharmacological methods, the nurse<sup>7,38</sup>

- emphasizes the importance of presenting the food in a way that will stimulate the patient's appetite and preventing the patient from being exposed to food smells;
- provides little and frequent feeding during the day instead of three main meals in order to increase the patient's tolerance;
- educates that consuming the foods that the patient likes will help to increase the appetite and also allows to consume fresh foods, juices, and fruits during the day;
- informs patient that liquids should not be consumed with meals and that they should take liquids between meals if the patient does not have difficulty in swallowing because it will cause a feeling of satiety;
- indicates eating with a favorite music, television show, or person;
- ensures that the patient is as physically active as possible and takes a short walk before a meal; and
- explains the consumption of high-calorie and protein foods to the patient and their relatives.

### Fatigue

Fatigue is a common symptom that significantly affects the quality of life in cancer patients. Severe fatigue symptoms are observed in 7%-52% of cancer patients.<sup>39</sup> Fatigue is also an important problem in patients with cervical cancer and may occur due to different reasons such as radiotherapy, not getting enough nutrients and fluids, and anxiety. In the pharmacological management of fatigue, corticosteroid drugs can be given to make the patient feel better.<sup>7</sup> In non-pharmacological methods, the nurse in the control of fatigue in the patient<sup>7,13</sup>

- determines the severity of the fatigue experienced by the patient and the factors that cause fatigue (anemia, anxiety, insomnia, etc.);
- contacts the relevant disciplines for psychotherapy, participation in support groups, and the application of behavioral cognitive therapies if the patient is depressed as a fatigue factor;
- checks the patient's laboratory findings and cooperates with the team for blood transfusion as the presence of anemia increases fatigue;

- instructs the patient to try to sleep for 7-8 hours every day, to create certain time periods for going to bed and waking up;
- helps to create an appropriate nutrition program that will help increase the patient's energy (high protein and calories);
- ensures that the patient is as active as possible during the day, is supported to perform daily activities, and exercise programs are prepared.

### Lymphedema

Lymphedema is a more common symptom in gynecological cancer diseases compared to other cancer types. It can occur due to removal of lymph nodes or radiotherapy treatment.<sup>40</sup> Patients with lymphedema experience more physical limitations and stress than those without, and their quality of life decreases. There is still no definitive treatment in the management of lymphedema, and what the nurse should do first is to educate the patient and family on how to reduce and control the risk of lymphedema.<sup>40,41</sup> Nurse in this training<sup>40,41</sup>

- ensures patients in maintaining normal body mass index to reduce the load on the lymphatic system;
- encourages patients to exercise regularly to aid lymphatic drainage;
- advises patients not to have a manicure or pedicure to prevent skin damage;
- ensures that the patient is cautious in areas where there is a high risk of insect, bee bite, or cat scratching to prevent skin damage,
- provides protection from infections because edematous skin is sensitive,
  - moisturizing the skin during the day to prevent cracking,
  - using sunscreen to prevent sunburn,
  - not staying in the sun for a long time.
- ensures that the patient uses a pressure suit while traveling;
- advises to avoid tight clothing to ensure lymphatic drainage, wear comfortable shoes;
- gives information about following the area for signs of infection, redness in the edematous area, and tenderness in the lymph nodes, it may be a sign of infection, therefore the area should be carefully evaluated.

### Pressure Ulcers

Pressure ulcers are localized injuries that occur in soft tissues on bony prominences that are exposed to pressure in the body. It most commonly affects the sacrum, heel, and ischium in the body.<sup>42</sup> In a study conducted, pressure ulcers have been reported to occur in 17.3% of cancer patients.<sup>43</sup> Pressure ulcers are associated with morbidity and mortality in patients, reducing the quality of life of patients and increasing healthcare costs.<sup>42</sup> For this reason, it is a problem that needs to be emphasized, and the nurse:<sup>7,44</sup>

- evaluates the risk of pressure ulcers to diagnose the patient;
- observes pressure points for signs such as temperature and color change;
- helps patients to change positions every 2 hours since the maximum time that the patient can stay in a fixed position is 2 hours at the most;
- helps patients in taking a bath every day and massaging the skin with vaseline supports the patient in this regard, as they will help preserve the integrity of the skin;

- ensures that the bed linen is smooth and dry and, if possible, a foam mattress is laid on the bed as it delays the formation of pressure ulcers;
- supports the patient with structures such as pillows to distribute the pressure in the body parts (sacrum, coccyx, heel, etc.) with a high risk of pressure ulcer development; and
- regulates the patient's diet and ensures that the patient receives a diet rich in calories, vitamins, minerals, and protein in order to preserve tissue integrity.

### Shortness of Breath (Dyspnea)

Shortness of breath or dyspnea is a subjective experience of varying intensity and quality, characterized by respiratory discomfort. It is one of the most common symptoms in terminal cancer patients.<sup>45,46</sup> In a study conducted, it has been reported that approximately 44.37% of advanced cancer patients experience dyspnea.<sup>45</sup> It is difficult to completely treat dyspnea, but appropriate pharmacological and non-pharmacological methods are available to improve the patient's quality of life. In pharmacological treatment, the patient is given oxygen and opioid therapy. For this, the nurse<sup>7,46,47</sup>

- determines the underlying cause and cooperates with the team for its treatment;
- helps the patient to stay calm as being afraid makes breathing difficult (distractions such as psychotherapy, relaxation exercises, music can be used to calm the patient);
- gives the appropriate position to facilitate breathing (semi-sitting position with the head of the bed raised 45 °);
- teaches the patient to breathe deeply through the nose, pursing the lips, and exhale twice as long as inhaling (breathing exercises); and
- Applies chest wall vibration to assist the patient's airway patency.

### Stress, Anxiety, and Depression

Cervical cancer is a disease that affects both physical and mental health of women.<sup>7,48</sup> In patients with cervical cancer, stress, anxiety, and depression can be seen depending on reasons such as physical symptoms, treatment, tumor stage, age, low socioeconomic level, and sexual problems.<sup>48,49</sup> In a study conducted, it has been reported that 75.7% of women with cervical cancer who have undergone treatment have stress, 26.5% anxiety, and 49.2% depression.<sup>50</sup> In the pharmacological management of these symptoms, antidepressant (such as amitriptyline) treatment can be started in accordance with the doctor's order. If possible, the individual can be referred to psychiatric support.<sup>7</sup> In the management of these problems, the nurse<sup>51</sup>

- communicates with the patient in an open, honest, and empathetic way and listens carefully to the patient in order to create an environment where the patient can express freely;
- encourages the patient to express their fears and concerns and allows them to ask questions;
- supports the patient in developing the appropriate coping methods and changing the unsuitable ones in order to effectively manage the patient's current situation;
- provides the patient with a quiet and well-organized environment to reduce sensory overload;
- introduces self and other healthcare team members to increase patient comfort; and
- provides the support of people who can support the patient in this process, if appropriate.



## Sexual Dysfunction

Cervical cancer can also have negative effects on a woman's sexual function.<sup>1,14</sup> In a study conducted, it has been reported that the prevalence of sexual dysfunction in women with cervical cancer is approximately 66.67%.<sup>14</sup> In particular, methods such as radiotherapy, chemotherapy, and surgery used in the treatment of cervical cancer in women; it can cause sexual dysfunction such as sexual arousal disorder, dyspareunia, abdominal pain during coitus, and decreased orgasm.<sup>52</sup> In a study conducted, it has been reported that women with cervical cancer receiving pelvic radiotherapy have problems such as postcoital bleeding, vaginal dryness, vaginal tightness, and decreased sexual desire.<sup>53</sup> Sexual dysfunction in patients with cervical cancer can be handled and managed with pharmacological and non-pharmacological methods. In pharmacological treatment, hormone-free and water-soluble vaginal moisturizers and lubricants and local vaginal estrogen therapy can be used. Non-pharmacological management includes counseling and sexual education.<sup>52</sup> Nurse in sex education:<sup>54</sup>

- supports couples in maintaining a healthy communication between couples for the continuation of sexual harmony;
- encourages partners to share what is important to them in their sexual life;
- supports spouses to mutually express their feelings and concerns about sexuality;
- states couples that starting sexual intercourse for couples when the woman feels ready and paying attention to emotional intimacy during sexual intercourse can reduce sexual concerns;
- conveys that foreplay can be extended to reduce the loss of sexual desire, arousal and difficulty in orgasm, and it can help women to remember positive sexual experiences in the past;
- counsels couples on family planning to prevent pregnancy during treatment.

## End-of-Life Care

In cases in which the disease processes of patients with cervical cancer have progressed irreversibly, these individuals can be given end-of-life care. End-of-life care is a special type of palliative care that begins with the diagnosis of an incurable disease and ends with the completion of bereavement care. The aim of this care is not to prolong life but to increase the comfort and quality of life of the individual, as well as to identify and meet the psychosocial and spiritual needs of the family.<sup>55</sup> In order to provide end-of-life care, the primary intervention is to identify patients with the last few months, weeks, or days. Palliative Prognostic Index and Karnofsky Performance Scale, which shows performance status, can be used as prognostic tools to provide this diagnosis.<sup>56</sup> While providing care to the patient who is determined to be in the end-of-life period, the basic principles of end-of-life care, care should be taken to provide high-quality care to the individual, to preserve the autonomy of the individual until the last moment by taking into account the choice of the place of death, to involve the family and relatives in the process, to care for the comfort of the patient and to establish a relationship based on respect. When the patient enters the death phase, the nurse should ensure the highest possible physical comfort and reduce the emotional and social stress of the patient. Unnecessary practices that may disturb the individual in nursing care should be avoided. Patients who are in their

last moments of life should be informed about this situation, and they should be with their loved ones in their last moments. In end-of-life care, the nurse should consider the family as well as the individual. End-of-life care should be carried out in a family-centered manner even after the loss of the individual. For this, the family should be provided with grief and loss support, and if necessary, they should be directed to seek professional help.<sup>57</sup>

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