



APPLICATION OF UNPLEASANT SYMPTOMS THEORY ASSESSMENT AND ROYADAPTATION MODEL THEORY IN PATIENTS WITH STAGE III CERVICAL CANCER

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ABSTRACT

Cervical cancer is a significant global health problem, with the number of cases and deaths rising every year. Patients with cervical cancer often experience symptoms such as bleeding, vaginal discharge, and pain, which significantly affect their quality of life. The aim of this study to conduct a comprehensive assessment, including physical, psychological, and social aspects, in managing patients with cervical cancer cannot be ignored. In patient management, in-depth evaluation of physiological factors such as bleeding, hydronephrosis, and electrolyte imbalance, as well as psychological and social factors, is essential to reduce the risk of morbidity and mortality. Nursing theories, such as Theory of Unpleasant Symptoms (TOUS) and Roy's Adaptation Model, can be used to conduct a comprehensive assessment and provide optimal care to cervical cancer patients. Social support also plays an important role in helping patients and their families adapt to the changes faced due to this disease. With a holistic and collaborative approach, it is hoped that morbidity and mortality rates for cervical cancer patients can be reduced both globally and in Indonesia.

Keywords: cervical cancer; roy adaptation model theory; stage III; unpleasant symptoms theory

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INTRODUCTION

Cervical cancer remains a major issue and burden in the world. In 2018, there were approximately 570,000 cases and 311,000 mortalities due to cervical cancer (Haryani, 2018). Cervical cancer cases increased with 604,127 new cases in 2020 and more than 341,831 deaths, representing nearly 8% of cancer deaths annually (Fernandes et al., 2022). The annual number of cervical cancer cases is predicted to increase from 570,000 to 700,000 between 2018 and 2030. In addition, the number of annual deaths from the disease is also expected to rise from 311,000 to 400,000. More than 85% of these cases and deaths occur in young women who are less educated and live in low- and middle-income countries (World Health Organization, 2020). According to data from WHO in 2020 the number of cervical cancer cases in the world ranks eighth with 662,301 sufferers, and deaths due to cervical cancer in the world ranks ninth, totaling 348,874 people. In Indonesia, cervical cancer ranks third with the number of new cases in 2022 totaling 408,662 with a death rate of 242,988 (Globocan, 2020).

Cervical cancer causes several symptoms experienced by patients usually, precancerous lesions do not show symptoms. If the cancer has become invasive, the most common symptoms are bleeding and vaginal discharge. In more advanced stages, symptoms may

progress to pain in the lower back or lower abdomen due to tumor pressure in the pelvic region, which may lead to ureteral obstruction, to oligo or anuria. Other advanced symptoms may arise according to the spread of the tumor to the affected organs, such as vesicovaginal fistula, rectovaginal fistula, and edema (Kemenkes RI, 2018). The wide range of symptoms felt by patients with cervical cancer makes nurses have to think thoroughly about how to assess patients with cervical cancer.

Nursing theory that can be used to identify the factors of symptoms felt by cervical cancer patients is to use the Theory of Unpleasant Symptoms (TOUS), which is a mid-level theory developed in 1995 and investigated in 1997. This theory consists of three factors, namely physiological, psychological, and situational factors that can affect the experience of symptoms. Physiological factors include the normal functioning of body systems, the presence of pathology, and the individual's energy level. Psychological factors include the mental state of the individual and their reaction to their illness. Finally, situational factors relate to aspects of an individual's physical and social environment that can influence their experience and reporting of symptoms (Srivastava & Tutor, 2021). Nurses can use the Roy Adaptation Model Theory (RAM) because this theory is a process by which individuals or groups adapt to certain situations through unified thoughts and feelings. This adaptation occurs through interactions between humans and their environment. According to Roy, humans have a unique ability to adapt to change (Lestari & Ramadhaniyati, 2018). Based on the symptoms felt by cervical cancer patients, the purpose of the study is to conduct an assessment using the theory of unpleasant symptoms (TOUS) to further analyze the assessment or assessment that has not been done. Failure to conduct a complete assessment can increase the risk of morbidity and mortality in cervical cancer patients. In addition, the importance of applying the Roy model to cervical cancer patients is so that patients can adapt to their condition.

METHOD

This case study explores the application of the Theory of Unpleasant Symptoms (TOUS) and Roy's Adaptation Model (RAM) in managing a single patient with stage III cervical cancer. The study involves a comprehensive assessment of the patient's physical, psychological, and social conditions. Data will be collected through clinical assessments, psychological evaluations, social support evaluations, semi-structured interviews, observations, and a review of medical records. Thematic analysis will be applied to qualitative data from interviews and observations, while descriptive statistics will summarize clinical assessment data. The TOUS will guide the evaluation and management of symptoms, while the RAM will be used to assess and support the patient's adaptation in various domains. Ethical considerations include informed consent, confidentiality, and institutional review board approval. The study aims to enhance understanding and application of these theories in cervical cancer care, improving the patient's quality of life and contributing to the reduction of morbidity and mortality rates.

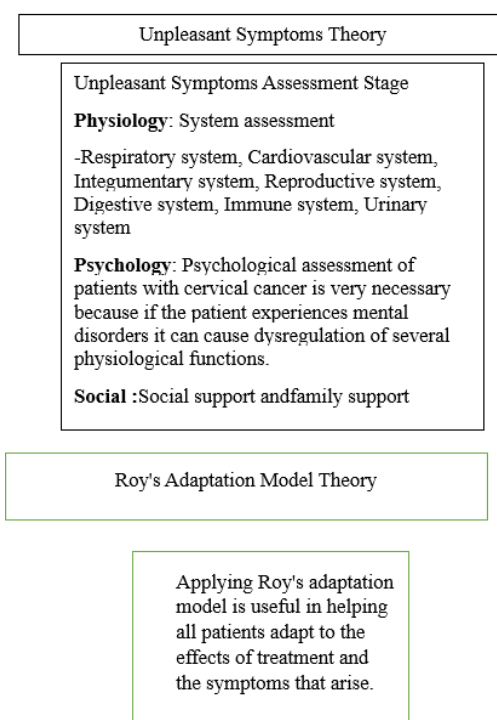


Figure 1. Case Report Theory Framework

RESULTS

The patient's name is Mrs. NTS age 35 years, date of birth December 10, 1988, with a history of P3A0, menarche age 13 years. The patient has been married three times in the patient's first marriage aged 16 years, the second marriage was 27 years old, the patient's third marriage was 33 years old, and the third husband was 27 years old. The patient came to the oncology clinic of RSHS on December 28, 2023 complaining of bleeding from the birth canal starting 3 days before admission to the hospital and increasing for 12 hours. The bleeding filled 1 underpad. Complaints were accompanied by profuse vaginal discharge, itching and odorless complaints had been felt from 3 months before admission. Complaints are not accompanied by pain. History of abdominal lumps or abdominal enlargement is denied, history of weight loss and appetite is denied, history of disturbed bowel movements is denied, history of malignancy in the family is denied, history of chronic diseases including diabetes, high blood pressure, asthma, and heart disease is denied. Due to these complaints, the patient sought medical attention at Hasan Sadikin Hospital in Bandung.

Assessment was conducted to determine the physiological factors of the patient based on the symptoms felt by the patient. The patient came with composmentis consciousness, measuring vital signs such as blood pressure: 112/74mmHg, Temperature: 36.7°C, RR: 20x/min, Pulse: 119x/min. Anthropometry: Weight: 66kg TB: 163cm. Cardiovascular system examination: lup dup heart sound in S1 and S2, can not be heard additional heart sounds such as murmurs and gallops, Capillary refill time examination: <2 seconds, conjunctiva appeared anemic. Respiratory system: There were vesicular sounds in the lungs, no additional sounds such as ronchi and wheezing. Regular breathing is not seen nasal lobe breathing. Immunology system is not palpable enlarged lymph nodes on the neck, under the chin or armpits. The nervous system where the results of the patient's consciousness examination are composmentis with a Glasgow coma scale score: On examination of the digestive system, the abdomen was palpated soft and data, no tenderness was found, no mass was palpated, there was no decrease in appetite and no decrease in the frequency of bowel movements. Urinary system: The

patient has a history of URS dextra surgery; dextra percutaneous nephrostomy at RSHS on 18/1/2024, a catheter was installed in the emergency room urine output of 300cc with clear urine color, on 29/1/2024 a bilateral kidney ultrasound was performed and the vesica urinaria are currently within normal limits. Examination of the reproductive system, the patient is attached to a vaginal tampon which is to accommodate bleeding so as not to seep out.. Vaginal tampons were changed every 24 hours. During speculum examination of the vagina, there was a 6x4cm tumor of exophytic nature, which is the growth pattern of tumors or wounds that protrude out of the tissue surface. Then the vaginal toucher examination where the vagina and vulva are normal. In the vagina there is a mass infiltration of the distal 1/3 of the vagina, the portion of the carcinomatus exophytic mass 6x4x3 cm is palpable. The results of the supporting examination of Ro Thorax X-ray 18/12/2023, did not appear intrapulmonary metastasis, and Roentgenologic cast within normal limits. Photo BNO 29/12/2023 there was suspected cholelithiasis, no signs of ileus. On 29/01/2024, ultrasound of bilateral kidneys and vesica urinaria was within normal limits.

Table 1.
Palliative Performance Scale (PPS)

PPS Level	Ambulation	Activity and evidence of Illness	Self care	Intake	Awareness level
100%	Full	Normal activity & work No evidence of illness	Full	Normal	Full
90%	Full	Normal activity & work There is some evidence of Pain	Full	Normal	Full
80%	Full	Normal activities with effort Some evidence of illness	Full	Normal or declining	Full
70%	Declining	Unable to work & do normal activities Significant factors appear	Full	Normal or declining	Full
60%	Declining	Unable to do hobbies/homework Significant disease appears	Sometimes need help	Normal or declining	Full or confused
50%	Sitting/lying down a lot	Unable to perform work Severe pain	Requires frequent assistance	Normal or declining	Full or confused
40%	Plenty in bed	Unable to perform activities Severe pain	Needs a lot of help	Normal or declining	Full or always sleepy Confused +/-
30%	In bed	Unable to perform activities Severe pain	Total care	Normal or declining	Full or Confused +/-
20%	In bed	Unable to perform activities Severe pain	Total care	Vacuuming At a minimum	Full or Confused +/-
10%	In bed	Unable to perform activities Severe pain	Total care	Vacuuming minimum	Drowsiness/ coma Confused +/-
0%	Died	-	-	-	-

Source: Kristanti *et al.*, (2021).

Laboratory examination results 03/03/2024 09:41 hemoglobin 8.3 g/dl, hematocrit 24.3%, leukocytes 12.25 103/ μ , platelets 340,000 103/ μ . Red blood cell distribution MCV (Mean Corpuscular Volume): 86.8, MCH (Mean Corpuscular Hemoglobin): 29.6, MCHC (Mean Corpuscular Hemoglobin Concentration): 34.2 . While the results of the Lab examination on 04/03/2024 at 06:46 WIB, the results of hemoglobin 9.0 g/dl, hematocrit 27.3%, leukocytes 11.74 103/ μ , platelets 359,000 103/ μ . Red blood cell distribution MCV (Mean Corpuscular Volume): 87.2, MCH (Mean Corpuscular Hemoglobin): 28.8, MCHC (Mean Corpuscular Hemoglobin Concentration): 33.0. With the results of cervix biopsy by an ob-gyn and

supporting examinations that have been carried out so that the patient is diagnosed with cervical Ca stage. IIIB; right hydronephrosis; anemia; electrolyte imbalance (Hyperkalemia, hyponatremia, hypochloremia, hypocalcemia). In conducting nursing assessments related to the general condition of cancer patients, nurses can use the Palliative Performance Scale (PPS) which consists of 8 levels, ranging from 30% to 100%. This scale considers aspects such as walking ability, activity and pain symptoms, self-care, food and drink intake, and the patient's level of consciousness.

Common symptoms of cancer patients can also be measured using the Edmonton Symptom Assessment System (ESAS) which is a multidimensional assessment tool for self-reporting symptom intensity for use in daily symptom assessment of palliative care patients (Bruera et al., 1991 in Wong et al., 2021). ESAS has been implemented and validated in a variety of palliative and cancer programs and countries (Chang et al., 2000; Philip et al., 1998 dalam Wong et al., 2021). It consists of a numerical rating scale for 10 common symptoms of advanced cancer (pain, fatigue, nausea, depression, anxiety, drowsiness, appetite, well-being, difficulty breathing, and sleeping) and uses a score range of 0 to 10 to measure the distress associated with physiological and psychological symptoms, with 0 meaning no symptoms at all and 10 meaning the worst possible symptoms (Wong et al., 2021). In the assessment of nursing care, it is not only an assessment of the patient's physiological factors but there needs to be a psychological and social assessment which can include the patient's mental state and their reaction to their illness, as well as situational factors related to aspects of the individual's physical and social environment that can affect their experience and reporting of symptoms. However, psychological and social factors have not been assessed in patients (Srivastava & Tutor, 2021).

DISCUSSION

Cervical cancer or cervical cancer is a type of cancer that originates in the cervix. The cervix is the lower part of the uterus that is cylindrical, protruding, and connected to the vagina through the ostium uteri externum. This type of cancer is divided into two types of cells, namely squamous / flat and glandular cells (Sangadji, 2020). Cervical cancer is mainly caused by the HPV (Human Papilloma Virus) (Kashyap et al., 2019). Referring to Prawirohardjo (2005) cervical cancer is a type of gynecological malignant tumor, which appears at the border of the epithelial layer lining the ectocervix (Porsio) endocervix of the cervical canal termed squamo-columnar junction (SCJ) (Mustika et al., 2016). Cervical cancer is a malignant disease and causes physiological changes or symptoms as felt by Mrs. NTS such as bleeding in the cervix, meeting 1 underpath, a lot of vaginal discharge, itching and odorless from the birth canal, complaints are not accompanied by pain, it could also be due to the effects of treatment. Patients with cancer also often complain of various kinds of symptoms which can be better focused by using the theory of unpleasant symptoms (TOUS) which consists of physiological, psychological, and situational factors that can affect experience (Srivastava & Tutor, 2021).

From the results of the assessment of physiological factors, it shows that *assessments* still need to be carried out on patients to prevent mortality, namely:

Assess Hemodynamics :

- Shock Index: It is a combination of the ratio of two elements Heart Rate (HR) and Systolic Blood Pressure (SBP), it is a complete set of physiological variables that can be used to measure how the body regulates itself to maintain blood pressure when there is a decrease in circulating volume, stroke volume, and cardiac output. To evaluate whether the shock index (SI), which is given by the formula $SI = \text{heart rate} / \text{systolic blood pressure (HR/SBP)}$

(Montoya et al., 2015). The normal range of shock index is 0.5-0.7 and some evidence suggests that up to 0.9 is acceptable. Values close to 1.0 indicate worsening hemodynamic status and shock. Increased SI correlates with decreased left ventricular enddiastolic pressure and circulating volume, even when HR and SBP are within normal limits.

Shock Index: $119/112 = 0.9$ (within normal limits)

Assess the cause of bleeding: Bleeding from the birth canal is a major symptom of cervical cancer. It is important to know how often and how much bleeding is occurring, and check for other signs of abnormal bleeding. Assess the cause and estimated amount of bleeding. The patient said that the bleeding from the birth canal from 3 days before admission to the hospital and increased in amount over 12 hours, the bleeding filled 1 underpad. Assess the Causes and Conditions of Anemia, Lekopeni, Thrombocytopeni, and Febrile neutropenia: Anemia is a condition where the hemoglobin level in the blood is low. It is important to know the cause of anemia in the patient, whether it is caused by bleeding due to cervical cancer, iron deficiency, or other factors. In addition, it is necessary to plan for proper anemia management, such as iron supplementation or blood transfusion therapy if needed. Lekopeni is lower than normal white blood cells (leukocytes), thrombocytopeni is lower than normal platelets, and febrile neutropenia is a condition where a person has a high body temperature (fever) along with a low number of neutrophils in the blood. Neutrophils are white blood cells that are important in fighting bacterial infections. When a person has febrile neutropenia, their immune system cannot fight infections effectively due to low neutrophil counts, increasing the risk of developing serious infections. This condition often occurs in patients undergoing chemotherapy or bone marrow transplantation, where chemotherapy can damage the bone marrow and reduce the production of white blood cells, including neutrophils (Handono & WN, 2017).

Assess nutritional status: BMI, LLA, can use MST (malnutrition screening tools), and perform albumin and total protein checks. Assess Electrolyte Imbalance Requirement: Electrolyte imbalances, including hyperkalemia, hyponatremia, hypochloremia, and hypocalcemia, are serious conditions that require immediate treatment. Further evaluation is required to determine the cause and severity of the electrolyte imbalance and to plan appropriate treatment, such as intravenous fluid administration or dietary adjustments.

Fluid requirement $30-50 \text{ cc/kg BW} = 30 \text{ ccx (patient's BW) kgbb}$

Fluid Requirement Formula

a. Watson's formula for men:

$2.447 - (0.09145 \times \text{age}) + (0.1074 \times \text{height in cm}) + (0.3362 \times \text{weight in kg}) = \text{total bodyweight in liters.}$

b. Watson's formula for women:

$-2.097 + (0.1069 \times \text{height in cm}) + (0.2466 \times \text{weight in kg}) = \text{total body weight in liters}$
(Suhartini et al., 2017).

IWL (Insensible water loss) formula

Rumus 1

$$IWL = \frac{n \times (\text{berat badan dalam (kg)})}{24 \text{ jam}} \dots\dots\dots (1)$$

Konstanta n =

- 1) Bila suhu <37.9°C maka n = 15
- 2) Bila suhu 38-39 maka n = 20
- 3) Bila suhu >39 maka n = 25

Rumus 2

- 1) Rumus IWL suhu normal

$$IWL = \frac{10 \text{ ml} \times (\text{berat badan dalam (kg)})}{24 \text{ jam}} \dots\dots\dots (2)$$

- 2) Rumus IWL suhu > 37.8°C

$$IWL = 500 \text{ ml} + \left(\frac{10 \text{ ml} \times (\text{berat badan (kg)})}{24 \text{ jam}} \right) \dots\dots\dots (3)$$

Source : Suhartini *et al* (2017)

Fluid Balance Formula

Intake/Fluid Entry: Starting from infusion solutions, drinks, fluid levels in the patient's diet, drug doses, including injections, drugs given intravenously, albumin, etc.

Output/Fluid Out: Urine within 24 hours should be measured; if the patient uses a catheter, the amount is calculated according to the volume collected in the urobag. Otherwise, the patient should collect their own urine, usually in a 1.5 liter mineral water bottle, and then stool (Suhartini et al., 2017).

Input liquid - Output liquid = Liquid balance

Assess the Risk of Cancer Spread: In addition to assessing the stage of cervical cancer, it is also important to evaluate the possibility of cancer spreading to other organs or tissues. Imaging studies such as CT scan or MRI may be required to determine the extent of cancer spread and plan treatment strategies accordingly. CA 125, Anatomic Pathology, PET Scan. Conduct a Pain Assessment: which includes chronic and acute pain as advanced cervical cancer is often accompanied by significant pain. It is necessary to evaluate the level and characteristics of pain experienced by the patient to plan effective pain management, including the administration of analgesics and other supportive care, using PMCPPI tools, etc.

It is important to coordinate between various PPAs (professional caregivers) namely nurses, specialist doctors including internal medicine experts, gynecological oncologists, urologists, and endocrinologists, clinical nutritionists, radiotherapy experts, nutritionists, pharmacists, to plan comprehensive management according to the patient's condition. The treatment plan from the doctor to the patient Mrs.NTS is improvement of general condition, PRC transfusion target Hb> 11gr/dL, tranexamic acid 3x500 mg IV, omeprazole 2x40mg IV, then consul TS IPD related to electrolyte imbalance, consul TS Urology to evaluate the effectiveness of nephrostomy, radiation according to schedule, informed consent of patient and family, observation of general condition, vital signs, input and output, creatinine ureum examination.

Glomerolus filtration rate (GFR) is one of a number of parameters to identify kidney function. GFR reflects how well our kidneys are functioning, usually calculated from creatinine levels in the blood. GFR or LFG (glomerolus filtration rate) is the best test in measuring the level of kidney function and determining the stage of kidney disease (O'Callaghan, 2009 in Veronika

& Hartono, 2019). (Formula for calculating GFR) <15/>15 To detect changes in patient physiology, it is necessary to use the Early Warning Score (EWS), a tool used when identifying physiological changes in patients, including changes in vital signs and level of consciousness during treatment. Hopefully, Early Warning Score can reduce the risk of worsening conditions and improve the survival rate of patients who experience cardiac arrest.

Table 2.
National Early Warning Sistem

Parameter	3	2	1	0	1	2	3	Nilai
Pernafasan	≤ 8	9-11	12-20		21-24	≥25		
Saturasi Oksigen	≤ 91	92-93	94-95	96				
Penggunaan Alat Bantu O2		Ya	Tidak					
Suhu	≤ 35	35.1-36.0	36.1-38.0	38.1-39.0	≥39.1			
Tekanan Darah Sistolik	≤ 90	91-100	101-110	111-219			≥220	
Denyut Jantung	≤ 40	41-50	51-90	91-110	111-130	≥131		
Tingkat Kesadaran			A			V.P.a atau U		
TOTAL :								

Information:
1-4 : Low
5-6 : Medium
>7 : High

Table 3.
NEWS Algorithm

Skor	Klasifikasi	Respon Klinis	Tindakan	Frekuensi Monitoring
0	Sangat Rendah	Dilakukan Monitoring	Melanjutkan Monitoring	Min 12 jam
1-4	Rendah	Harus segera dievaluasi oleh perawat yang terdaftar kompeten harus memutuskan apakah perubahan frekuensi pemantauan klinis atau wajib eskalasi perawatan klinis	Perawat mengasesmen atau perawat meningkatkan frekuensi monitoring	Min 4-6 jam
5-6	Sedang	Harus segera melakukan tinjauan mendesak oleh klinisi yang terampil dengan kompetensi dalam penilaian penyakit akut dibangsal, biasanya oleh dokter atau perawat dengan mempertimbangkan apakah eskalasi perawatan ke tim perawatan klinis yang diperlukan (yaitu tim penjangkauan perawatan kritis)	Perawat berkolaborasi dengan tim / pemberian asesmen kegawatan / meningkatkan perawatan dengan fasilitas monitor yang lengkap.	Min 1 jam
≥7	Tinggi	Harus segera memberikan penilaian darurat secara klinis oleh tim critical care outreach atau code blue dengan kompetensi penanganan pasien kritis dan biasanya terjadi transfer pasien ke area perawatan dengan alat bantu	Berkolaborasi dengan tim medis/ pemberi asesmen kegawatan/ pindah ruangan HCU/ICU	Bad set monitor/ every time

Based on the literature review, the side effects felt by cervical cancer patients during the chemotherapy process such as nausea and vomiting, because both are side effects of chemotherapy that are usually felt by cervical cancer patients. This also includes early changes from the toxicity of chemotherapy drugs, there are also other side effects such as anemia, a situation where Hb levels in the blood are lower than normal, which can occur because of the reduction of stem cells due to the toxicity effects of chemotherapy drugs that affect the spinal cord. These side effects arise because chemotherapy drugs not only destroy cancer cells, but can also hit healthy cells, especially those that are growing rapidly, other side effects in the form of neurotoxins and Alopecia or baldness can occur due to exposure to chemotherapy drugs that are given regularly to reduce or eliminate cancer cells, but can also damage or destroy healthy cells that are growing rapidly. Cervical cancer patients undergoing chemotherapy also experience allergic reactions, thrombocytopenia, leukopenia, and stomatitis (Pribadi et al., 2022).

Psychological factors: A number of risk factors for depression in cancer patients, including type of cancer, stage of disease, type of care received (such as outpatient, inpatient, or palliative care), individual factors (such as family history, history of psychological issues, and personality type), and interpersonal and social factors (including history of stressful life events, loneliness, social isolation, low socioeconomic status, and social support) (Siregar. et al., 2022). Psychological assessment in patients with cervical cancer is necessary because if the patient is mentally disturbed, it can cause dysregulation of several physiological functions leading to immune dysfunction, which in turn contributes to the development of cancer (Savard, 2001; Reiche et al., 2004; Holden et al., 1998 in Wu & Chiu, 2023). It has been suggested that stress and depression may promote tumor progression by inhibiting the expression of class-I and class-II major histocompatibility complex molecules and by reducing nucleus activity. Indeed, mental illness is associated with a decrease in cytotoxic T cell and natural killer cell activity that is critical for immune surveillance against tumors (Reiche et al., 2004 in Wu & Chiu, 2023).

Social factors: It is important to provide social support that is appropriate to the individual's needs. Too much social support can make patients feel overloaded and neglected, which in turn can interfere with their sense of self-control. Social support is also understood from the perspective of how it is received by the individual, known as "perceived social support", including emotional, informational, and instrumental support. Emotional support is communication that shows affection, care, love, and understanding, as well as the availability of close people to listen and talk about problems. Informational support is providing information, guidance, and advice to help individuals overcome problems. While instrumental support is real help from the closest person in the form of certain materials or services (Witjaksono & Maulina, 2016 in Siregar. et al., 2022). The main care giver for patients is the family because the family is the main support system that provides direct care for each patient's health condition. Family support is one of the most effective methods because of the family's role in making health-related decisions, providing care for sick family members, adjusting the environment, and utilizing available health resources (Sitepu & Nasution, 2015). A person diagnosed with an illness is not necessarily psychologically and socially prepared for the condition of their illness, they will experience the five stages of grieving identified by Ross (1969), namely denial, anger, negotiation, depression, and finally acceptance. During this process, individuals need to adapt to the changes that occur to maintain their health and balance. Roy's Adaptation Model Theory is a suitable model to be applied to patients with stage III cervical cancer. Roy's adaptation model is a nursing approach that is very suitable for patients experiencing cervical cancer. The use of this model changes the way of life of

patients and their families, requiring them to adjust to these changes. Failure to adjust can result in inappropriate behavior. Applying Roy's adaptation model is beneficial to help all patients adapt to the effects of treatment and symptoms that arise. Nurses need to have the ability to provide comprehensive care by applying nursing theories and models so that the care provided is optimal. The application of the Roy adaptation model also strongly supports the care provided by nurses through family support, because the family is the main support system that provides direct care at each stage of the care process for their family members, whether healthy or sick (Maryati et al., 2018). In a study conducted by Kulsum et al., (2022); Distinarista et al., (2024); Levkovich et al.,(2022) that support from husbands can have a significant influence on the patient's recovery process, one of which is that with the support of husbands, patients with cervical cancer can more easily adapt to their illness. Theory of unpleasant symptoms (TOUS) and Roy's adaptation model theory can be used by nurses to assess physiological, psychological and social factors based on perceived symptoms so that nurses can find what assessments have not been done and must be done immediately to prevent mortality of cervical cancer patients. Based on the symptoms felt by the patient, the nurse can use the Roy adaptation model theory so that the patient can adapt to the changes experienced during illness. If the patient is able to adapt and the assessment given is in accordance with the patient's needs, it is hoped that the mortality and morbidity rates of cervical cancer patients in the world and Indonesia can be reduced.

CONCLUSION

Symptoms of cervical cancer vary from bleeding to pain and can affect various aspects of daily life. A comprehensive assessment, including physical, psychological and social aspects, is very important so that the treatment given is in accordance with the patient's needs. More in-depth evaluation of physiological, psychological and social factors is needed to ensure appropriate treatment and reduce the risk of morbidity and mortality. Roy's adaptation model is a nursing approach that is suitable for helping patients and their families adapt to the changes that occur due to this disease. The importance of appropriate social support should also not be overlooked in efforts to provide care.

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