

CARE NEEDS OF WOMEN WITH SUSPECTED OR DIAGNOSED WITH OVARIAN CANCER DURING HOSPITALIZATION: A MULTICENTER CROSS-SECTIONAL STUDY

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ABSTRACT

Purpose: This study aimed to identify care needs of women with ovarian cancer and suspected ovarian cancer during hospitalization according to the Roy Adaptation Model (RAM).

Material and Methods: This cross-sectional and descriptive study was carried out two university hospitals in Izmir, in Turkey. The sample included 100 women with ovarian cancer or suspected ovarian cancer in hospitalized. Care Needs of Women with Ovarian Cancer Questionnaire was used. We used descriptive statistics and content analysis.

Results: This study used RAM to examine care needs across four compliance domains: physiologic, self-concept, role functions, and interdependence. The diagnoses of “disturbance in sleep pattern and fatigue” were evaluated within the physiological mode; the diagnoses of “lack of knowledge regarding diagnosis and treatment process” were evaluated within the self-concept mode; the diagnoses of “decrease in continuity of family processes, inadequacy in fulfilling roles” were evaluated within the role function mode; and the diagnosis of “change in perception of femininity” was evaluated within the interdependence mode.

Conclusion: According to RAM, the nurse's interventions tailored to the patient's needs can effectively ensure the patient's compliance with the treatment process and meet their needs.

Keywords: Care needs, nursing care, Roy Adaptation Model, ovarian cancer

INTRODUCTION

Ovarian cancer is the eighth deadliest cancer for women, and the recurrence rate is 80% within two years of initial treatment (1). The final diagnosis of ovarian cancer is usually determined surgically (2). Therefore, patients are admitted to hospital for surgery. During treatment process, needs of patients should be considered because of side effects of the treatments and advanced stage disease (3). When there is a mismatch between perceived needs of patients and suitability of service provided, unmet

needs are revealed (4). Women are expected to have unmet needs due to symptoms of illness, suspicion of cancer and admission to hospital.

Women with ovarian cancer have many physical, psychological, spiritual, sexual, emotional needs during diagnosis and treatment (3,5,6). Fitch and Steele (2010) stated that women with ovarian cancer have difficulty in managing these needs and cannot seek help from clinical professional (7). Unmet needs can also lead to inability to access the best medical care, complementary and alternative treatment and

health care (8). In addition, unmet needs were found to be cancer spread, lack of information to help heal, uncertainty about the future, lack of energy and concerns about people close to them (3).

It is understood that women with ovarian cancer have very a lot of care needs. Most studies have examined needs that a year occurred after diagnosis or treatment (6,8). For any reason, hospitalization is stressful for patients. Also, women who are hospitalized with ovarian cancer or suspicion have to deal with stressors such as uncertainty, fear and creating burden for their families (7,9,10). However, it was determined that there was a deficiency in determining needs of patients after admission to the hospital. A study examining needs of women with ovarian cancer during hospitalization could not be reached. Failure to meet needs of patients increases patient care costs, reduces quality of life, adversely affects the diagnosis and treatment process and patient satisfaction (11).

The Roy Adaptation Model, one of the most frequently used models in nursing, defines humans as systems that can adapt to changing environmental conditions. Adaptation problems occur when individuals cannot cope with environmental stimuli. These stimuli are categorized into three categories: focal, contextual and residual stimuli. In this system, the nurse takes an active role in ensuring the individual's adaptation to changing environmental conditions (12). Patients are affected biologically, psychologically and socially due to multiple drug therapies and surgical intervention in ovarian cancer treatment. By determining the care needs of patients with ovarian cancer according to RAM, it is expected that positive results will be achieved in patients' compliance with both surgical intervention and medical treatment. Determination of these needs are necessary to facilitate the adaptation of women to the preoperative and postoperative period, to increase the awareness of health professionals in this patient group, to plan care for patients, and to increase satisfaction of patient. Therefore, our purpose was to determine needs of women with ovarian cancer or suspicion.

MATERIAL AND METHODS

Design

A cross-sectional and descriptive study was performed to determine needs of women with ovarian cancer or suspicion.

Participants

Data were collected between July 2017 and September 2019 from inpatients from the gynecologic and gynecologic oncology clinics of two university hospitals in İzmir, Turkey. Eligible participants included women who were between 18-65 years, diagnosed with an adnexal mass, pelvic mass, peritoneal carcinoma and ovarian cancer and preoperative period in the study. Women who have a history of psychiatric disease were excluded from the sample (13,14). The sample size of the study was determined as 90 in G Power 3.0 program based on in one group, medium effect size (0.5), significance level of 0.01 and power 99%. During this study, 133 women with suspected or diagnosed ovarian cancer were screened for participation. Of these, nine patients refused to participate in the study, while 24 others were excluded because they did not meet the sampling criteria. A total of 33 patients were excluded. 100 women participated in the study.

Data Collection

The first researcher collected the data for this study in the patient room in the gynecologic oncology and gynecologic and obstetric wards. The second researcher was involved in the evaluation and interpretation of the data obtained. The data of the study were collected by face-to-face interview method. Data on laboratory findings were obtained from the patient file. Data collection took an average of 20-25 minutes.

Descriptive Information Form and the Care Needs of Women with Ovarian Cancer Questionnaire were used. These forms were prepared in light of the literature and Roy's Adaptation Model (RAM) and taking opinions of three experts by two researchers. The Descriptive Information Form consisted of questions that included descriptive features such as age, educational status, health problems. Care Needs of Women with Ovarian Cancer Questionnaire which was created based on RAM, included 67 questions related to the physiological, self-concept, role function and interdependence modes. This form consisted of 30 open and 37 closed-ended questions about the presence of symptoms, information resources, the role of femininity and motherhood. To determine the functionality of the prepared questionnaire form and the scales used, a pre-test was performed with a total of five patients. After the pre-test, a rearrangement of the forms was not

Table 1. Descriptive features of women

	n	%
Age		
20-34*	15	15.0
35-49	31	31.0
50-64	32	32.0
65 ve older	22	22.0
Educational status		
Illiterate	14	14.0
Literate	4	4.0
Primary school	55	55.0
Secondary school	13	13.0
University**	14	14.0
Marital status		
Married	75	75.0
Single	25	25.0
Menopause status		
Menopause	54	54.0
Not menopause	46	46.0
Diagnosis		
Adnexal mass	78	78.0
Ovarian cancer	18	18.0
Peritoneal carcinoma	4	4.0
Time passed after the previous surgical operation (mounth)		
Not undergone surgery	82	82.0
0-12 months	6	6.0
13 months and more	12	12.0
Total	100	100.0

* A person aged 18 was included in the 20-34 age group.

** 5 associate degree graduates were included in the university group.

required and the patients who had taken the pre-test were excluded.

According to the RAM, basic nursing knowledge is aimed at understanding people's adaptation to different life situations. The main purpose of the model is to maintain homeostasis (12). Women admitted to the hospital change from a healthy individual to a patient. The reason why content of form is structured according to the model is that it emphasizes holistic care of nursing. Thus, appropriate interventions for individual can be

planned and evaluated by giving point of view to the collected data.

Data Analysis

The quantitative data were analyzed using the IBM SPSS Statistics 23 program (IBM Corp., Armonk, NY, USA). The data were presented as mean \pm SD, percentages, min and max. For open-ended questions, free-text analysis was conducted using traditional content analysis principles. The patients'

free-text responses were categorized by two researchers who are experts on this topic.

Ethical Considerations

Research ethics board approval (Dokuz Eylul University Non-Invasive Research Ethics Committee, Decision No: 2017/02-18, Date: 09.02.2017) and permission was obtained from the hospitals. The participants gave both oral and written informed consent.

RESULTS

The mean age of the women was 51 years, 55% of women are primary school graduates and 54% of the participants were in menopause (Table 1). Almost half of women (40%) have chronic disease, and 54% have a chronic disease, including hypertension, diabetes and asthma. The most prevalent diagnosis was adnexal mass (78%). The mean time to diagnosis was 6.4 months and previous surgery was 45.3 months.

It was determined that 21% of women had dyspnea, distension of 63%, loss of appetite of 36%, pain of 52% and sleep problems of 39% (Table 2).

Women's findings regarding the self-concept mode needs are given in Table 2 and 3. 15% of the women stated that they made the decision about the treatment themselves, 48% with their families, 37% with their physician. The majority of women (88%) stated that they were informed about diagnosis and treatment only by the physician, 7% of them stated that they were informed by physicians and nurses, and 5% of them were informed by physicians, nurses or the internet. It was found that women wanted to be informed by physicians most. 73% of the women stated that they wanted to get face-to-face information and 17% of them stated that they would like to additionally receive brochures (Table 2). Women stated that they needed information about the presence of the cyst, the surgical procedure and the recovery process (Table 3).

One-third of women stated that the illness and hospital process affected femininity perception, 57.6% of them had motherhood role and 26.7% of them had a significant effect on the spouse role. Almost all of the participants (98%) were accompanied by their relatives.

Themes and sub-themes related to women's perception of femininity, role of motherhood, interaction with spouse, family and friend relationships are given Table 3.

The majority of women whose femininity perception is affected stated that their perception of femininity is negatively affected. One participant stated:

'I will not feel as a wife. When my uterus is removed, I will feel like an eunuch.'

Some of the women reported that they feel like a burden to their children during the hospital process and that is why they feel sorry. A woman told:

'My daughter is heart patient. Although she is sick too, she takes care of me.'

A few of the participants came from different city. For this reason, they stated that they were separated from their spouses. In addition, due to the presence of female patients in clinic, husbands are not admitted to clinic except visit hours. Particularly, spouses working in shifts cannot attend visiting hours. A participant said:

'Visit hours do not match my husband's working hours. Therefore, my husband cannot come here. We're just talking on the phone. I miss him so much. Several of women stated that she was angry because of uncertainty and her caregiver did not understand her. Only a few of women reported that they took care of their grandchildren before they got sick, but they could not take care of their grandchildren because they are in the hospital now.'

DISCUSSION

The discussion will consist of physiological, self concept, role function and interdependence modes sections.

Care Needs of Women in the Physiological Mode

In our study, most of the women had problems with the gastrointestinal system such as pain, abdominal bloating, changes in taste, loss of appetite, nausea, vomiting, weight loss, decreased skin turgor and constipation. The symptoms of ovarian cancer patients were found to be substantially associated with their impaired physical performance in the American Cancer Society's Cancer Survival Study I (15). The most common unmet needs of women with ovarian cancer were in the symptom dimension (16). Among patients with ovarian cancer, ascites-induced abdominal distension, decreased appetite, weight loss, constipation, pleural effusion; dyspnea due to pulmonary congestion; nausea and vomiting due to decreased stomach motility may occur (7,17,18). Our findings are similar to those of other research. It is understood that women have many problems in the physiological mode. Ovarian cancer is typically diagnosed in late stages.

Table 2. Care Needs of Women in the Physiological Mode and Self Concept Mode

Physiological Mode	n	%	Self Concept Mode	n	%
Oxygenation			Her requested information source		
Dyspnea	21	21.0	Physician	71	71.0
Nutrition			Physician and nurse*	23	23.0
Presence of abdominal distension	63	63.0	Internet	3	3.0
Loss of weight	47	47.0	Sufferers who the same disease	2	2.0
Loss of appetite in the last week	36	36.0	No wish to receive information	1	1.0
Changes in taste in the last week	23	23.0	Preferred method of accessing information		
Nausea in the last week	29	29.0	Face to face	73	73.0
Vomiting in the last week	11	11.0	Face to face and brochure	17	17.0
Elimination			Face to face and telephone	3	3.0
Constipation	24	24.0	Face to face, brochure and telephone	2	2.0
Activity and rest			Through relatives	4	4.0
Fatigue in the last 24-hour			Internet	1	1.0
Not tired	51	51.0	Understanding the given information/education		
A little tired	34	34.0	Use of medical term	12	38.8
So tired	15	15.0	Giving much information and using medical term	9	29.0
Sleep problems			Having anxiety	6	19.4
No sleep problems	61	61.0	Having hearing problems	2	6.4
Have sleep problem	39	39.0	Pain	2	6.4
Protection			Coping with pain		
Decreased skin turgor	37	37.0	Not using any method	53	53.0
Hemoglobin level			Taking drug	17	17.0
Low (<12 g/dL)	43	43.0	Nonpharmacological method (music, massage, shower, walking)	16	16.0
Albumin level			Sleeping	14	14.0
Hypoalbuminaemia (<3.5 g/dL)	15	21.1			
Senses					
The presence of pain					
No pain	48	48.0			
In the pelvic area	40	40.0			
In the abdominal	9	9.0			
In the waist	3	3.0			
Fluid and electrolytes					
Edema of the lower extremities	18	18.0			

* Patients who wanted to get information from doctors and nurses through their relatives were included in the group that wanted to get information from doctors and nurses.

Table 3. Themes and sub-themes related to the information, role function and self conception needs

Information needs		Role function and self conception needs	
Themes	Sub-themes	Themes	Sub-themes
Information content	<ul style="list-style-type: none"> -Presence of cysts in the ovary -The size of the cyst -Presence of cancer -Ascites in the abdomen -Reproductive effects -Malign-benign distinction 	Perception of femininity	<ul style="list-style-type: none"> -Loss of femininity -Feeling like a man -Loss of reproductive -Feeling of being half human
	<ul style="list-style-type: none"> - Laparoscopic/laparotomy surgery - To be taken organs - Recovery time - Discharge time 	Role of motherhood	<ul style="list-style-type: none"> -Missing her children -Sadness for seperation -Feeling of inadequacy -Feeling of being a burden for her children
Information need	<ul style="list-style-type: none"> -Benign or malign -Reproductive effects 	Interaction with spouse	<ul style="list-style-type: none"> -Feeling strong. -Strengthening spouse communication -Fear of disfavor -Communication problem -Missing her husband
	<ul style="list-style-type: none"> - To be taken organs - Duration of surgery - Laparoscopic/laparotomy surgery - Duration of surgery - Physician who will do surgery -Anesthesia type 	Family and friend relationships	<ul style="list-style-type: none"> -Sadness because of losing care role -Anger -Decreased social relations -Keeping diagnosis secret
	<ul style="list-style-type: none"> -Waiting for pathology result / worry / -Getting rid of disease -The time of learning the pathology result -Effect of surgery on movement -Time to start feeding -Effect of surgery on menopause -Effect on working condition -Duration of report -Time to recover the caring role 		

Table 3. Continue

Information needs		Role function and self conception needs	
Themes	Sub-themes	Themes	Sub-themes
The effects of the disease and hospitalization	-Loss of family caregiver roles -Can not get permit for work -Decreased activity -Decreased self-care -Pain -Insomnia -Discomfort from distension -Fear of cancer -Fear of death -Uncertainty -Sadness -Anxiety due to hospitalization -Anxiety and concern due to privacy -Relaxation due to reduced uncertainty -Feeling less responsible -Shock -Acceptance	Perception of femininity	-Loss of femininity -Feeling like a man -Loss of reproductive -Feeling of being half human

Many symptoms occur due to ascites and mass in the abdomen in advanced stage (19,20). Nutritional disorders related to cancer and pressure of mass are seen in these patients and immune response decreases. This situation facilitates the emergence of preoperative and postoperative complications in women. It may also adversely affect the effectiveness of treatment. The findings of this studies support this result. The length of hospital stay of patients with ovarian cancer developing malnutrition and response to treatment decreases, postoperative complication development and morbidity rates increase (21,22). Therefore, nurses should carefully evaluate the physiological mode care needs of hospitalized women with adnexal mass, and plan nursing interventions to prevent, early recognise and reduce problems.

One-third of the women in our study stated that they felt a little tired and 39% had sleep problems in the hospital. Fatigue and decreased sleep quality were the most prominent symptoms among women with ovarian cancer (3,8,23). It is thought that the causes of sleep and fatigue problems among these women are caused by malnutrition, abdominal ascites and mass pressure and psychological problems. Women reported a decrease in physical activity and self-care during the hospital process. In other studies, it is understood that self-care is an important problem in women with ovarian cancer (7,24). Nurses should definitely plan an intervention to solve sleep, fatigue, physical activity and self-care problems of women with ovarian cancer.

Care Needs of Women in the Self Concept Mode

In the study, it was found that half of the women made the decisions regarding the diagnosis and treatment process with their family, while only 15% of the women stated that they made their own decisions. Nowadays, the decision-making process of patients is supported by the concept of informed consent. It was determined that the most important factors affecting the patients' decision-making were the recommendations of the health Professional (25). It is stated that the beliefs, preferences, beliefs of patients about decision making, power dynamics, communication style and doctor factors affect the decision-making process of ovarian cancer treatment (26,27). Pozzar et al. (2018) found that patients were influenced by doctor referral, interpersonal relationships, family and friends' recommendations when deciding on ovarian cancer treatment (27). Both

these research results and other research results show that women with ovarian cancer are very open to the guidance of health workers and their families in the decision-making process. For this reason, nurses should support women to make right decision for themselves in the decision-making process.

It was determined that women needed information about diagnosis and treatment, characteristics of the mass, operation, recovery process, physical and social effects. In our study, women stated that they needed information about malignancy status of the mass, effect of the disease on reproduction, organs to be taken by surgery, duration of the surgery, time of surgery, physician who will do surgery and type of anesthesia to be given. Women stated that they were given too much information and had difficulty understanding the information given because medical terms were used. More than half of women in our study stated that they understood the information given. Women express a lack of knowledge at various stages of their illness (28). The information need is one of the unmet needs of patients with gynecological cancer. The information provided should be tailored to the patient's education and information needs (29,30). Rietveld et al. (2018) found that 35% of ovarian cancer survivors were satisfied with the information they received during the diagnosis and treatment process. Women reported that they mostly received information about illness, medical tests and treatment (8). In another study, it was found that obtaining information about the test results of women with ovarian cancer made women feel better (7). Nurses should determine information need and characteristics of the patient from the beginning of the hospitalization. The nurses should provide information considering patient characteristics such as education, age, etc. The nurse should test whether the information provided by the nurse meets the needs of the patient and whether the patient perceives the information correctly. The nurse should remember that given information will be reduced the patient's anxiety and the treatment process will be positively affected.

The patients stated that they wanted to meet with the person they were asked for information face to face. In a study conducted with women surviving gynecological cancer, it was determined that the most frequently preferred method of getting information about women was one-to-one interviews, followed by brochures and internet resources. In other studies, it was found that women mostly preferred the brochure

method, followed by a one-to-one interview with the healthcare professional and internet resources (31). In a study comparing written and verbal preoperative information in gynecologic oncology surgery, it was found that written information increased patient satisfaction; decreased pain score, length of hospital stays and daily analgesic use. Also, it was found that hospitalization of patients with endometrial cancer on the day before surgery reduced preoperative evaluation and preparation time (32). It is understood from the results of the research that women need different education methods. However, it is understood that getting information by face to face interview method is an indispensable method. When planning an education, nurse should determine the training methods appropriate to the needs of the woman and plan her training accordingly.

Half of women stated that they had pain, but half of the women stated that they did not know how to cope with pain. Therefore, nurses should consider how patients can cope with pain, which is an important problem. It was determined that presence of postoperative pain decreased patient satisfaction (33). Nurses should teach how to cope with pain in hospitalize patients and include positive method coping with pain in the preoperative training content (34,35). Pain management in preoperative education will contribute to decrease of pain scores, shortening of hospital stay and increasing satisfaction with surgical procedure in postoperative period (32,36).

In this study, the participants stated that the meaning of the disease and the reactions to the disease were negative. Shock, uncertainty, sadness, fear of death, decrease in activity, stress, anxiety was negative emotions expressed by the participants. Women with ovarian cancer experienced emotional problems such as feeling sad and depressed, worrying about outcome of treatment was out of control, uncertainty, shock, treatment-related anxiety, feeling bored or useless, and fear of death (7,9,28,37). Studies have shown that women experience a sense of uncertainty due to relapse and fear of death (3,6,9). Negative emotions and reactions of women in our study may result from the negative meaning of cancer. Nurses should be aware of the negative feelings these women may experience. Nurses should be involved in a team work involving psychologists and psychiatrists to help patients cope with these negative emotions (38).

In our study, women mostly want to know the status of benign/malignant masses related to diagnosis and

tests. Women with a pelvic mass usually refer to units such as internal medicine, gastroenterology and are consulted to gynecologists as a result of tests. Surgery is required to differentiate benign/malignant pelvic masses and patients are usually referred to gynecological oncology requiring advanced expertise. Referring patients to a gynecological oncologist may cause anxiety for the patient and lead to going distant hospitals (39). This causes uncertainty in women and causes them to experience anxiety. The nurse should be aware of the underlying causes and feelings of anxiety and uncertainty of the hospitalized women for surgery.

Care Needs of Women in the Role Function and Interdependence Modes

It is understood that women with adnexal masses had intense problems regarding femininity, motherhood, spouse, friendship perception and relationships. In our study, almost half of the women stated that their perception of femininity was affected. Women stated that they experienced feelings of losing their femininity, being like men, losing reproduction and being half human. Having strong social support have been shown that increased women's self-esteem and decreased levels of depression and anxiety. In addition, abdominal scars, hair loss, weight gain, ovarian and uterine losses, which are symbolic organs of female identity, significantly affect body image (40). Childbearing, which is perceived as a part of the perception of femininity, is one of the important issues that cause concern among women with ovarian cancer. Campos et al. (2012) stated that most women with ovarian cancer and borderline tumors discuss fertility options with their physicians, but very few seek information on fertility conservation (41). In Turkish culture, fertility is an important role attributed to women by society. The belief that 'a woman without a uterus is not a woman' is common in Turkish society (42). It should help women develop positive coping methods and highlight their strengths. Nurses should support self-care in order to cope with changes in the woman's physical appearance. In addition, fertility desires of young women should be evaluated and health professionals should discuss appropriate treatment options and the effect of treatment on fertility.

More than half of the women stated that the role of motherhood was affected. Women expressed that they felt longing for their children and felt sadness and inadequacy due to being separated and being a

burden for their children. Tan et al. (2021) found that that because the disease is genetic inherited, women with ovarian cancer are fearful for the future and concerned about their daughters (28). Women with ovarian cancer stated that they received support from their families and especially their children in symptom management (43). It is stated that children are seen as a source of power and motivation for gaining the sense of being normal of the patients, but psychological stress rate is high in the mothers with cancer (37). Women also describe the treatment process as 'a struggle for all of us' regarding their maternal role and want to see their children grow up (43).

A quarter of women stated that their partner roles and relationships were affected. Women stated that they missed their husbands during fear of disfavor, communication problems and hospital stay. However, some women stated that they felt stronger and their relationships were strengthened in this process. In studies, while some of the women stated that they received adequate support from their spouses, some of them stated that their relationship with their spouses was negatively affected during the diagnosis and treatment process (9,10,13). It was found that women could not perform their role as spouses and avoid close relationships due to feelings of shame and fear (7,44). In addition, disharmony associated with sexual function and body image leads to social withdrawal (13). In addition, women stated that they were especially afraid of their husbands' disliking themselves and that they were worried about their appearance (9,44). In contrast to these studies, women stated that they missed for their spouses. This situation is thought to be caused by the fact that male caregiver is not allowed to stay in the hospitals where the studies are conducted. In addition, while previous studies included outpatient treatment, our study only addressed the hospital process and did not reveal any side effects associated with chemotherapy (13). Nurses should be aware of women's missing for their husbands and children during the hospital process and plan their visit hours appropriately to improve the psychological well-being of patients.

Women who expressed that family relations were affected during the hospital process mentioned negative feelings such as hiding the disease and decreasing social relations. Patients with ovarian cancer; reported negative effects such as the burden of ovarian cancer and treatment on family and friends, lack of support, loss of relationship and difficulty in

maintaining it (10). Holt et al. (2014) stated that before the diagnosis, some women with gynecological cancers shared their concerns with their relatives, while others conceal their concerns until the diagnosis of cancer was confirmed (45).

The caregivers of the patients were determined as children, mothers, siblings and other family members. To have someone to care for patients in hospitals in Turkey it is usually requested by both health professionals and patients. In Turkish culture, there is a perception that the patient should have caregiver. It was determined that women who without caregivers felt lonely and worthless (46). Hospital caregiver can be a good practice for women to feel safe. However, it can also cause anxiety because patients feel they are burdening their relatives. Nurses should be aware that women hospitalized for adnexal mass or ovarian cancer often experience problems in the modes of role function and interdependence. It should also consider individuality when identifying women's problems and planning their care.

Limitations

The strength of our study is that the study was conducted in two hospitals. However, the limited sample size may affect the generalization of the study results. Secondly, scales that evaluate care needs are usually focused on needs after post-treatment. There is no specific scale developed to assess the care needs of women with ovarian cancer that has been validated and reliable.

The questionnaire created in this study was created based on the researchers' experiences and literature knowledge. Therefore, there is a need to develop a special scale that measures the needs of women with ovarian cancer in the preoperative period. Thirdly, considering that their care needs may be affected, patients who had a previous gynecological operation were also included in the study. However, this situation may have limited the care needs of patients who underwent surgery more than once.

CONCLUSION

In conclusion, women admitted to gynecological oncology service due to the diagnosis or suspicion of ovarian cancer have many needs related to physiological, self, interdependence and role function modes. It is seen that gastrointestinal symptoms, sleep problems and fatigue come to the forefront in relation to physiological modes. Women have stated that they have the most information needs in self

concept mode. Face to face interviews were the first choice of women as receiving information. In addition, in role function and interdependence modes, women expressed that missing their spouses and children and affecting their perceptions of femininity. Nurses should be aware of gastrointestinal symptoms in patients, determine the factors that decrease and increase appetite by performing nutritional control, evaluate whether the patient is getting enough calories, and cooperate with the dietician when necessary. From the moment of hospitalization, nurses should evaluate the patients' sleep quality and plan sound, light, and sleep hygiene procedures in a way that doesn't disrupt their sleep. Nurses should evaluate patients' fatigue daily and make environmental arrangements to minimize energy expenditure. Furthermore, it's crucial to strategize the patients' visiting hours and relatives scheduling to fulfill their role-function and interdependence needs. Future research is needed to explore what care needs of women with ovarian cancer or suspicion are in the hospital. It is recommended to develop a scale that can measure the care needs of women with ovarian cancer. Roy Adaptation Model can be used while developing the scale. The use of the model in patients with suspected or diagnosed of ovarian cancer guides the nurse in determining the needs in the modes of physiology, self-concept, role function and interdependence and in providing individualized health care.

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REFERENCES

1. GLOBOCAN. [Internet]. Cancer Today. 2022. [Accessed date: 07.02.2024]. Available from: https://gco.iarc.who.int/today/en/dataviz/bars?mode=cancer&key=total&group_populations=1&types=0&sexes=2&sort_by=value0&populations=900&multiple_populations=0&values_position=out&cancers_h=39
2. Muto, M. G. Approach to the patient with an adnexal mass. UpToDate 2020.
3. Beesley VL, Price MA, Webb PM, et al. Changes in supportive care needs after first-line treatment for ovarian cancer: identifying care priorities and risk factors for future unmet needs. *Psychooncology* 2013;22(7):1565-1571.
4. Adamakidou T, Menti K, Charalambous A, Tsiou C, Vlachou E, Govina O. Changes in unmet care needs, social support and distress from initial diagnosis to post-surgery in patients with gynecological cancer: A longitudinal study. *Eur J Oncol Nurs* 2023;66:102358.
5. Thomas TH, Nauth-Shelley K, Thompson MA, et al. The Needs of Women Treated for Ovarian Cancer: Results From a #gynccsm Twitter Chat. *J Patient Cent Res Rev* 2018;5(2):149-157.
6. Pasvanis M, Hegarty S, Russell H, Peate M, Marino JL. Exploring the experiences and priorities of women with a diagnosis of ovarian cancer. *Support Care Cancer*. 2023;31(7):432.
7. Fitch MI, Steele R. Identifying supportive care needs of women with ovarian cancer. *Can Oncol Nurs J* 2010;20(2):66-74.
8. Rietveld MJA, Husson O, Vos MCC, van de Poll-Franse LV, Ottevanger PBN, Ezendam NPM. Association between information provision and supportive care needs among ovarian cancer survivors: A cross-sectional study from the PROFILES registry. *Psychooncology* 2018;27(8):1922-1929.
9. Burles M, Holtslander L. Cautiously optimistic that today will be another day with my disease under control. *Cancer Nursing* 2013;36(6):436–444.
10. Simacek K, Raja P, Chiauuzzi E, Eek D, Halling K. What do ovarian cancer patients expect from treatment? *Cancer Nursing* 2017;40(5):E17–27.
11. Yıldırım Kocaman N, Kaçmaz N, Özkan M. İleri evre kanser hastalarının karşılanmamış bakım gereksinimleri [Unmet care needs in advanced stage cancer patients]. *Journal of Psychiatric Nursing* 2013;4(3):153-158.
12. Roy C. Extending the Roy adaptation model to meet changing global needs. *Nurs Sci Q* 2011;24:345–351.
13. Güler B, Mete S. Feelings, thoughts and experiences of women diagnosed with adnexal mass: A qualitative study. *Health Care for Women International* 2019;42(7-9):962-975.

14. Güler B, Mete S. Effects of relaxation-focused nursing program in women with ovarian cancer: A randomized controlled trial. *Pain Manag Nurs* 2023;24(4):e35-e45.
15. Zhou Y, Irwin ML, Ferrucci LM, et al. Health-related quality of life in ovarian cancer survivors: results from the American Cancer Society's Study of Cancer Survivors-I. *Gynecol Oncol* 2016;141:543-549.
16. von Gruenigen VE, Huang HQ, Cella D, et al. Quality of life, symptoms and care needs in patients with persistent or recurrent platinum-resistant ovarian cancer: An NRG Oncology/ Gynecologic Oncology Group study. *Gynecologic Oncology* 2018;150:119-126.
17. Segev Y, Segev L, Schmidt M, Auslender R, Lavie O. Palliative care in ovarian carcinoma patients-a personalized approach of a team work: a review. *Arch Gynecol Obstet* 2017;296(4):691-700.
18. Ebell MH, Culp MB, Radke TJ. A Systematic review of symptoms for the diagnosis of ovarian cancer. *Am J Prev Med* 2016;50(3):384-394.
19. Purcell SA, Elliott SA, Kroenke CH, Sawyer MB, Prado CM. Impact of body weight and body composition on ovarian cancer prognosis. *Curr Oncol Rep* 2016;18(2):8.
20. Balogun N, Forbes A, Widschwendter B, Lanceley A. Noninvasive nutritional management of ovarian cancer patients. *Int J Gynecol Cancer* 2012;22:1089-1095.
21. Kusuma F, Riani M, Witjaksono F. Association between risk of malnutrition and surgical outcome in ovarian cancer patients. *eJournal Kedokteran Indonesia* 2021;9(3):203-207.
22. Rinninella E, Fagotti A, Cintoni M, et al. Nutritional interventions to improve clinical outcomes in ovarian cancer: a systematic review of randomized controlled trials. *Nutrients* 2019;21(11):6. pii: E1404.
23. Martin ML, Halling K, Eek D, Reaney M. "Lower abdominal pains, as if i was being squeezed...in a clamp": a qualitative analysis of symptoms, patient-perceived side effects and impacts of ovarian cancer. *Patient* 2019;13(2):189-200.
24. Simonelli LE, Pasipanodya E. Health disparities in unmet support needs of women with gynecologic cancer: an exploratory study. *Journal of Psychosocial Oncology* 2014;32:727-734.
25. Kitamura Y. Decision-making process of patients with gynecological cancer regarding their cancer treatment choices using the analytic hierarchy process. *Japan Journal of Nursing Science* 2010;7:148-157.
26. Tariman JD, Berry DL, Cochrane B, Doorenbos A, Schepp KG. Physician, patient, and contextual factors affecting treatment decisions in older adults with cancer and models of decision making: a literature review. *Oncol Nurs Forum* 2012;39(1):E70.
27. Pozzar R, Baldwin LM, Goff BA, Berry DL. Patient, physician, and caregiver perspectives on ovarian cancer treatment decision making: lessons from a qualitative pilot study. *Pilot Feasibility Stud.* 2018;4(4):91.
28. Tan JH, Sharpe L, Russell H. The impact of ovarian cancer on individuals and their caregivers: A qualitative analysis. *Psycho-Oncology* 2021;30:212-220.
29. Verkissen MN, Ezendam NPM, Fransen MP, et al. The role of health literacy in perceived information provision and satisfaction among women with ovarian tumors: a study from the population-based PROFILES registry. *Patient Educ Couns* 2014;95(3):421-428.
30. Kullberg A, Sharp L, Johansson H, Bergenmar M. Information exchange in oncological inpatient care—patient satisfaction, participation, and safety. *Eur J Oncol Nurs* 2015;19(2):142-147.
31. Papadakos J, Bussière-Côté S, Abdelmutti N, et al. Informational needs of gynecologic cancer survivors. *Gynecol Oncol* 2012;124(3):452-7.
32. Angioli R, Plotti F, Capriglione S, et al. The effects of giving patients verbal or written pre-operative information in gynecologic oncology surgery: a randomized study and the medical-legal point of view. *Eur J Obstet Gynecol Reprod Biol* 2014;177:67-71.
33. Best JT, Musgrave B, Pratt K, Hill R, Evans C, Corbitt D. The impact of scripted pain education on patient satisfaction in outpatient abdominal surgery patients. *J Perianesth Nurs* 2018;33(4):453-460.
34. Arden-Close E, Mitchell F, Davies G, et al. Mindfulness-Based interventions in recurrent ovarian cancer: A mixed-methods feasibility study. *Integr Cancer Ther* 2020;19:1534735420908341.
35. Felix MMDS, Ferreira MBG, da Cruz LF, Barbosa MH. Relaxation therapy with guided imagery for postoperative pain management: An integrative

- review. *Pain Manag Nurs*. 2019;20(1):3-9.
36. Chow KM, Chan CWH, Choi KC, Siu KY, Fung HKS, Sum WM. A theory-driven psycho-educational intervention programme for gynaecological cancer patients during treatment trajectory: A randomised controlled trial. *Psychooncology* 2020;29(2):437-443.
 37. Arida JA, Bressler T, Moran S, D'Arpino S, Carr A, Hagan TL. Mothering with advanced ovarian cancer: "you've got to find that little thing that's going to make you strong". *Cancer Nurs* 2019;42(4):E54-E60.
 38. Nelson G, Bakkum-Gamez J, Kalogera E, et al. Guidelines for perioperative care in gynecologic/oncology: Enhanced Recovery After Surgery (ERAS) Society recommendations-2019 update. *Int J Gynecol Cancer* 2019;29(4):651-668.
 39. Ronco DA, Manahan KJ, Geisler JP. Ovarian cancer risk assessment: a tool for preoperative assessment. *Eur J Obstet Gynecol Reprod Biol* 2011;158(2):325-329.
 40. Roland KB, Rodriguez JL, Patterson JR, Trivers KF. A literature review of the social and psychological needs of ovarian cancer survivors. *Psychooncology* 2013;22(11):2408-18.
 41. Campos SM, Berlin S, Matulonis UA, et al. Young women diagnosed with early-stage ovarian cancer or borderline malignancy of the ovary: a focus on fertility and sexual function. *J Psychosoc Oncol* 2012;30(4):387-401.
 42. Reis N, Beji NK, Coşkun A. Quality of life and sexual functioning in gynecological cancer patients: results from quantitative and qualitative data. *Eur J Oncol Nurs* 2010;14(2):137-46.
 43. Hagan TL, Donovan HS. Ovarian cancer survivors' experiences of self-advocacy: a focus group study. *Oncol Nurs Forum* 2013;40(2):140-147.
 44. Cosentino, Sgromo D, Merisio C, Berretta R, Pruneti C. Psychophysiological adjustment to ovarian cancer: preliminary study on Italian women condition. *Appl Psychophysiol Biofeedback* 2018;43(2): 161-168.
 45. Holt KA, Hansen HP, Mogensen O. Supportive care needs for women with gynecological cancer and their relatives during the prediagnostic period. *Cancer Nurs* 2014;37(6):457-67.
 46. Uysal N, Gürol Arslan G, Mete S. The feelings and experiences of hospitalized patients regarding informal caregivers: a qualitative study. *Soc Work Health Care* 2019;58(2):166-181.