

STUDY PROTOCOL

The effect of the "Femininity Identity Improvement Program" based on cognitive behavioral and expressive techniques applied to gynecological cancer patients on prolonged grief reactions: Study protocol for randomized controlled trial



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### **Abstract**

The research was designed to determine the impact of the Femininity Identity Improvement Program based on cognitive-behavioral and expressive techniques applied to gynecological cancer patients on their prolonged grief responses. The research is the study protocol created for a randomized controlled experimental study. The research protocol prepared in accordance with SPIRIT 2013 was registered in the Clinical Trials System (NCT05529303). The research was conducted with 80 patients (40 patients in the intervention group and 40 patients in the control group) who underwent surgery in the gynecology and obstetrics clinic of a university hospital within the last year. Among these patients, those who had a surgery at least three months ago were included in the study. The intervention group participated in the Femininity Identity Improvement Program for 10 weeks, with sessions once a week, each lasting 90-120 minutes. The control group received no intervention. Measurements were taken before the program (pretest), at the end of the program (posttest at the 10th week), and three months after the program (follow-up measurement) to determine the effect of the program. Data were collected using the Prolonged Grief Disorder Scale-Patient Form. The Analysis of Covariance (ANCOVA) was used to analyze the data obtained at different times. The study integrates two psychotherapeutic interventions (cognitive-behavioral theory and art therapy) in an innovative way to structure the Femininity Identity Improvement Program for psychiatric nursing practice. Psychiatric nurses in oncology and other relevant clinical settings are recommended to apply this program to provide comprehensive care using current approaches.

Keywords: Femininity, cognitive behavioral therapy, art therapy, grief, cancer

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# Introduction

Cancer is one of the most complex diseases of our era and its incidence is rapidly increasing, making it one of the most significant threats to human health [1]. According to the latest data published by the World Health Organization (WHO) in 2022, it ranks among the top causes of death worldwide, with 10 million deaths reported in the year 2020 [2]. Gynecological cancers refer to malignancies affecting the female genital organs and are a major cause of mortality and morbidity in women, following breast and lung cancer [3]. It ranks among the top 10 cancers diagnosed among women in Türkiye [4].

The symptoms arising from gynecological cancers and the application of radiotherapy, chemotherapy, and surgical treatments can lead to issues related to a woman's reproductive capacity. Consequently, this may result in feelings of infertility, inadequacy, and imperfection, as well as a decrease in body image and self-esteem, a lack of self-confidence, hesitation in engaging in intimate relationships with the opposite sex, and a sense of incompleteness within the family [5-7]. Particularly, the loss of body parts associated with femininity significantly influences a woman's body image. This is because fertility, being a spouse, and the role of motherhood play a significant role in society's perception of 'feminine identity' [5,8-10]. For a woman who feels unable to fulfill this significant role, cancer diagnosis may signify a sense of inadequacy and a genuine mourning experience [5,7,11-15].

It is acknowledged that the experience of suffering, grief, and mourning, which arises from life-threatening illnesses and entails physical, emotional, and social losses, is a universal and natural response [16]. Prolonged grief is characterized by pronounced symptoms and significant functional impairment, and the individual believes that their life has ended with the loss and that their pain will never cease. In the context of cancer, it is unclear at which point the perception of loss initially occurs in the individual (whether it is during the pre-diagnosis stage, the diagnosis process, or upon learning of the terminal stage, etc.). Distinguishing where normal grief ends and prolonged grief begins is a challenging task [17]. In longitudinal studies

involving gynecological cancer patients in the sample, it has been reported that the levels of grief in patients tend to increase over time [18]. Studies aiming to examine the grief process in cancer patients have indicated that patients experience high levels of grief, with variations in grief averages depending on certain variables [19,20].

Interest in psychological interventions has grown over time alongside research aimed at understanding the various challenges cancer patients face and improving their quality of life. When the individual and group-based psychological interventions are examined, it is observed that the effects of techniques such as Cognitive-Behavioral Therapy (CBT), mindfulness-based interventions, acceptance and commitment therapies, and expressive techniques including mindfulness-based art therapy on cancer patients have been investigated [21-25]. The CBT techniques are compatible with the use of expressive art techniques. Both CBT and expressive arts share the common goal of facilitating behavior change [26]. In group settings, individuals find relief by sharing their experiences of loss, realizing that intense emotions like grief and pain are also experienced by others [27]. A study conducted with gynecological cancer patients undergoing chemotherapy to determine the impact of art therapy on anxiety and hope levels reported significant improvements in both anxiety and hope levels following art therapy sessions [28]. In a study involving cervical cancer patients, cognitive-behavioral stress management intervention was found to reduce anxiety and depression levels and was deemed an effective intervention for improving the quality of life [29].

Creative art therapies such as visual arts and music are categorized as nursing interventions. Nurses play a significant role in integrating these interventions with medical treatments and activating the patient's creative potential. Nursing care interventions of this nature have been increasingly employed by nurses both globally and in Türkiye [30].

When the literature was reviewed, no study addressing prolonged grief responses related to the losses experienced by gynecological cancer

patients concerning their femininity identity was found. This study aims to use cognitivebehavioral theory-based expressive interventions to address the psychosocial issues arising from the losses experienced by gynecological cancer patients related to their femininity identity. The concept of 'femininity identity improvement' in gynecological cancer patients is addressed for the first time in this study. In addition, this program is intended to contribute to the literature as a psychiatric nursing practice by integrating two separate psychotherapeutic interventions (cognitive-behavioral theory and art therapy) in an innovative approach to enhance femininity identity. Enabling psychiatric nurses in oncology and related clinics to implement this program is expected to significantly enhance the quality of life for patients by offering them comprehensive care through contemporary approaches.

#### Aim of the Research

The study was designed to determine the impact of the cognitive-behavioral and expressive techniques-based "Femininity Identity Improvement Program" applied to gynecological cancer patients on their prolonged grief responses. The hypotheses of the study are as follows:

H1<sub>0</sub>: "The Femininity Identity Improvement Program" based on cognitive-behavioral and expressive techniques applied to gynecological cancer patients has no effect on prolonged grief responses.

H2<sub>0</sub>: There is no change in the mean scores of the Prolonged Grief Disorder Scale for gynecological cancer patients in the intervention group across measurement times.

H3<sub>0</sub>: There is no difference in the mean scores of the Prolonged Grief Disorder Scale-Patient Form between the intervention group and the control group in the post-test measurements.

H4<sub>0</sub>: There is no difference in the mean scores of the Prolonged Grief Disorder Scale-Patient Form between the intervention group and the control group in the follow-up measurements.

H1<sub>i</sub>: "The Femininity Identity Improvement Program" based on cognitive-behavioral and expressive techniques applied to gynecological cancer patients has an effect on prolonged grief responses.

**H2**<sub>i</sub>: There is a change in the mean scores of the Prolonged Grief Disorder Scale for gynecological cancer patients in the intervention group according to the measurement time.

H3<sub>1</sub>: There is a difference in the mean scores of the Prolonged Grief Disorder Scale-Patient Form between the intervention group and the control group in the post-test measurements.

**H4**<sub>i</sub>: There is a difference in the mean scores of the Prolonged Grief Disorder Scale-Patient Form between the intervention group and the control group in the follow-up measurements.

#### Materials and Methods

#### **Ethical Considerations**

Ethical approval for the research was obtained from the Clinical Research Ethics Committee of the Afyonkarahisar Health Sciences University Faculty of Medicine on August 5, 2022, with decision number 423. Written permission was also obtained from the Chief Physician's Office of the University's Health, Practice, and Research Center on May 11, 2022, with document number E.82432, to conduct the research within the institution. In the implementation phase of the research, necessary permission was obtained from the university rectorate for the use of a room specifically designed for group interventions. All participants in both the intervention and control groups who agreed to participate in the research were informed by the researchers about all the details of the research process. They were provided with voluntary informed consent forms, and written permissions were obtained after reading the informed consent form. The confidentiality of all data obtained from the participants was ensured by the researchers. The research protocol was registered in the Clinical Trials registry with the number NCT05529303.

# Research Type

This research has been designed as a randomized controlled experimental study with pre-test, post-test, and follow-up assessments for the intervention and control groups. The randomized controlled trial protocol for this study has been prepared in accordance with the SPIRIT 2013 guidelines [31] (**Table 1**).

 Table 1. Standard protocol items: Recommendations for design and outcome evaluations and experimental trials (SPIRIT).

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	Selection/ At the start	Baseline	Intervent	t <b>ion</b> (Femi	ninity Iden	tity Improv	Intervention (Femininity Identity Improvement Program)	gram)					Follow-up	dn-A
Time	Patients who have undergone surgery within the last year and who had their surgery at least three months ago (t.)	Before the interven- tion (t <sub>0</sub> )	Week 1 (t <sub>1</sub> )	Week 2 (t2)	Week 3 (t <sub>3</sub> )	Week 4 (t4)	Week 5 (t <sub>5</sub> )	Week 6 (t <sub>6</sub> )	Week 7 (t <sub>7</sub> )	Week 8 (t <sub>8</sub> )	Week 9 (t <sub>9</sub> )	Week 10 (t <sub>10</sub> )	End of the intervention program	Three months after the final intervention
Registration														
Eligibility screening	×													
Informed consent	×													
Assignment		Х												
Interventions														
Intervention group			X	X	X	X	X	×	×	×	×	X		
Control group														
Evaluations														
Sociodemographic information	X													
Prolonged Grief Disorder Scale score	×												X	×

#### Randomization

All eligible patients meeting the inclusion criteria were administered the 'Prolonged Grief Disorder Scale-Patient Form' as a pre-test by the researcher [17]. After collecting the pre-test data, a statistician independent from the research performed the random assignment of groups. Group assignments were made as Group A and Group B, and the researcher was informed about these assignments with two separate opaque envelopes after the homogeneity of the data was checked. An external faculty member, independent of the study, determined Groups A and B through a random drawing. After the intervention program was implemented, the post-test and follow-up test data were also collected by an external faculty member for statistical analysis. The data were transferred to a computer by an independent statistician, who was blinded until all analyses were completed. The randomization process was performed according to the CONSORT 2017 (Consolidated Standards of Reporting Trials) guidelines [32]. The Consort flowchart for the intervention and control groups in the study is presented in **Figure-1**. In the study, random allocation and concealment of the randomization process ensured the control of selection bias.

#### **Blinding**

In this randomized controlled study, the Femininity Identity Improvement Program to be applied to the intervention group must be administered by a researcher with specialized training. For this reason, blinding of the researcher was not be possible since the researcher was also

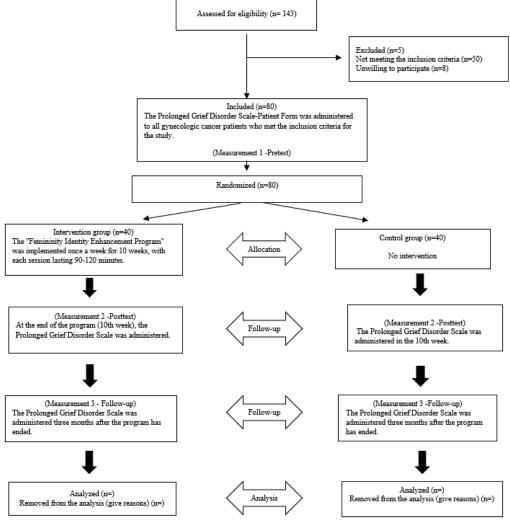


Figure 1. CONSORT 2017 flow diagram.

responsible for implementing the intervention program. As a 10-session 'Femininity Identity Improvement Program' was administered to the participants in the intervention group, participant blinding was also not feasible. Posttest and follow-up assessments were conducted by another researcher who did not know the participants' group assignment. The data, coded as Groups A and B, were transferred to a computer by the same individual. The analysis of data for Groups A and B was performed by an independent statistician. Following the completion of the statistical analysis and report writing, the coding for the intervention and control groups was revealed by the researcher responsible for data transfer to the computer. The process of data collection for the post-test and follow-up assessments, data coding, statistical analysis, and reporting were conducted while ensuring blinding to mitigate detection bias, statistical bias, and reporting bias.

#### **Inclusion Criteria**

- Being between the ages of 18-65,
- Being diagnosed with gynecological cancer,
- Knowing that you are diagnosed with cancer,
- At least three months have passed since the completion of surgical treatment,
- Being able to read and write,
- Volunteering to participate in the study.

#### **Exclusion Criteria**

- Having a diagnosis of any mental disorder (such as depression, anxiety, schizophrenia, bipolar disorder)
- Having an obstacle to establishing and maintaining effective communication
- Being in terminal stage

# Criteria for Exclusion during the Study

- The participant states that she wants to leave the research,
- The participant does not attend/cannot attend at least two sessions for any reason,
- The participant has a deterioration in mental well-being and/or the development of a medical

condition that will prevent the participant from participating in the sessions.

# Research Population and Sample

The sample size calculation was conducted power analysis (G\*Power software). The study is based on the mean scores of the Prolonged Grief Disorder Scale-Patient Form, which is used as a measurement for prolonged grief in cancer patients. The reason for considering the mean scores of the Prolonged Grief Disorder Scale-Patient Form as the variable is the content of the "Femininity Identity Improvement Program" applied to the intervention group, which is designed to address prolonged grief and femininity perception. Upon reviewing the literature, it was found that the scale itself or a parallel form of it was not utilized in previous studies. In cases where there is no literature available, conducting a pilot study and performing power analysis based on the values obtained from the pilot study is a reliable method. Therefore, a pilot study was conducted with a total of 30 cases (15 cases in the intervention group and 15 cases in the control group) to run the power analysis process [33]. Based on the measurement results of the pilot study and the two-tailed Mann-Whitney U test, with a 95% confidence level (1- $\alpha$ ), a 95% test power (1-β), and an effect size of d=0.932, it was determined that each group should include 33 cases, resulting in a total sample size of 66 cases for the study (Figure 2). However, considering potential losses during the study, the number was increased by 20% to reach a total of 80 women [34].

# **Research Setting and Characteristics**

The research was conducted with patients who met the inclusion criteria of having undergone surgery within the last year at the Gynecology and Obstetrics Clinic of a university hospital and having at least 3 (three) months passed since the surgery. Patients who were eligible according to the inclusion criteria and came for outpatient check-ups or were receiving treatment in the chemotherapy or radiotherapy units at the time of the study were asked to give verbal and written consent to participate in the study.

# **Data Collection Instruments**

# Personal Information Form

The form, created by researchers based on a literature review [8,28,35], contains a total of 15 questions, including information about gynecological cancer patients' age, marital status, place of residence, educational background, status of having a child, family structure, employment status, and type of cancer and treatment.

# Prolonged Grief Disorder Scale-Patient Form (PG-12-Patient Form)

This scale is used to assess the emotional experiences and grief responses of cancer patients related to the losses caused by the disease. It was initially developed to measure grief symptoms by a group of researchers led by Prigerson and was originally called the Complex Grief Inventory. With the inclusion of Prolonged Grief Disorder in the proposed classification for ICD-11 (International Classification of Diseases), the scale was renamed as the Prolonged Grief Disorder Scale. The Turkish version of the scale's validity and reliability was assessed by Danışman et al. in 2017. It is a 5-point Likert scale consisting of 12 items. An increase in the total score from the scale indicates an increase in grief symptoms [17].

# Implementation Phase of the Research

The intervention groups, consisting of 8-10 participants each, [36] determined through randomization, received the Femininity Identity

Improvement Program based on cognitivebehavioral and expressive techniques for 10 weeks (**Table 2**).

The program sessions were conducted once a week, each lasting 90-120 minutes. The program and the participant information booklet for the intervention group were created by the researchers after consulting with 10 experts in the field. The Lawshe technique was used to gather expert opinions [37]. The control group did not receive any interventions during the study. To assess the program's effectiveness, measurements were taken from both groups before the program (1st measurement - pretest), at the end of the program (2nd measurement posttest - 10th week), and three (3) months after the program ended (3rd measurement - followup). Based on the results of the study, the control group participants also received the program.

# **Statistical Analysis**

The SPSS software package was used for data analysis, which was blinded to the intervention and control groups and conducted by an independent researcher. The normality of data distribution was assessed. In the data analysis, the number, percentage, standard deviation, mean, chi-square, independent and dependent t-tests were performed, and the magnitude of the test statistic and degrees of freedom (t, F, r, etc.), effect size (ES), confidence interval (CI), and statistical power were calculated. The study involved comparing the values obtained at each time point for groups, posttest measurements

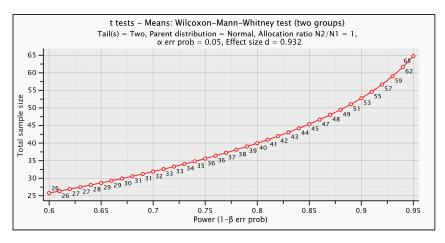


Figure 2: G Power report.

of groups, follow-up measurements of groups, and differences between groups after follow-up measurements (posttest). These comparisons were performed using the Analysis of Covariance (ANCOVA). Similarity analysis was conducted for the intervention and control groups. Cronbach's alpha was calculated to examine the scale's reliability.

# **Discussion and Conclusion**

According to Kübler-Ross, when patients can no longer deny their illness, when they need more treatment, and when they become weaker while trying to cope with more symptoms, they may no longer be able to view this situation with a smile, and their emotional numbness or anger may be replaced by a deep sense of loss. This

Table 2. Femininity Identity Improvement Program.

Sessions	Aim	Content	Duration	Materials
Session 1: Introduction & Getting to know each other	Getting to know the group members     Explanation of the group process     Expression of group members' expectations regarding group work     Sharing the group's purpose with group members     Setting the group rules     Sharing experiences related to the illness	Introduction of the group leader Providing detailed information to group members about the meeting place, frequency, duration, and session content of the group Distributing the informative booklet prepared for participants Ice-breaking game Distributing name tags prepared for group members Activity titled "Flowers in Our Garden" Setting group rules through interactions after the activity Relaxation exercise Informing about homework assignments Summarizing the session Sharing feelings and thoughts about the session among group members One-minute silence practice	90-120 minutes	A3-sized paper, flower pots made of colored cardboard, colored pencils, crayons, scissors, glue, various art supplies (different colored craft papers, background cards, cotton, string, buttons, glitter, etc.)
Session 2: Psychoeducation and Cognitive Model	Raising awareness among group members about the biopsychosocial effects of cancer     Presentation of the cognitive model	Emotion and mood regulation     Review of the first session     Homework assignments     Informing about the agenda     "Bring Emotions to Life"     icebreaker game     Presentation of the biopsychosocial effects of cancer and their relationship with emotions, thoughts, and behaviors     "Drawing the Picture of the Illness" activity     "4-4-6-2" Breath Counting Exercise     Informing about homework     Summarizing the session     Group members sharing their emotions and thoughts about the session     One-minute silence practice	90-120 minutes	A4 paper, pencil, colored pencils
Session 3: Self- Exploration and Body Awareness	Helping group members recognize the changes in their bodies due to cancer     Increasing body awareness	Emotion-mood regulation     Briefly reviewing the previous session     Sharing homework assignments     Informing about the agenda     Body scan (in a sitting position)	90-120 minutes	3 sheets of A4 paper, a pencil, and colored pencils

 Table 2. (continued) Femininity Identity Improvement Program.

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Helping individuals perceive their bodies as a whole	"Reach for Your Star" game     Providing information about homework     Summarizing the session     Allowing group members to share their feelings and thoughts about the session		
Being able to recognize suppressed emotions     Being able to identify unmet needs and express them     Expressing the overall body image	Emotion-mood regulation     Briefly reviewing the previous session     Sharing homework assignments     Providing information about the agenda     "Silent Scream" exercise     Tree Meditation     Providing information about homework assignments     Summarizing the session     Allowing group members to share their feelings and thoughts about the session     One-minute silence practice	90-120 minutes	A4 paper, pencil, colored markers
Discussing the concept of "femininity (being a woman)" with group members.     Allowing group members to openly express their feelings regarding femininity     Encouraging group members to openly express their feelings about their bodies as women	Emotion-mood regulation     Briefly reviewing the previous session     Sharing homework assignments     Informing about the agenda     Working on the concept of "femininity (being a woman)" by associating it with an object     Playing the "Waterfall" game     Providing information about homework     Summarizing the session     Allowing group members to share their feelings and thoughts about the session     One-minute silence practice	90-120 minutes	A4 paper, a pencil
Recognizing challenging emotions related to loss     Developing the ability to manage recognized challenging emotions     Perceiving oneself as a whole     Developing self-compassion	Emotion-mood regulation     Briefly reviewing of the previous session     Sharing of homework assignments     Informing about the agenda     Psychoeducation     "Creating a Woman" Exercise     "Self-compassion break"     meditation     Informing about homework assignments     Summarizing the session     Sharing feelings and thoughts about the session     One-minute silence practice	90-120 minutes	A3 size drawing paper, pencils, various coloring materials (dry, felt-tip, watercolor, etc.), scissors, glue, various art supplies (different colored craft papers, cardboard, cotton, string, buttons, glitter, etc.)
Loving one's body and accepting the losses     Accepting one's limitations     Overcoming difficulties in self-expression	Emotion-mood regulation     Briefly reviewing the previous session     Sharing homework assignments     Informing about the agenda     "Draw Your Emotion" Exercise     Seated meditation with acceptance     Providing information about homework     Summarizing the session     Allowing group members to share their feelings and thoughts regarding the session	90-120 minutes	A4 paper, a pencil, dry coloring markers
	Being able to recognize suppressed emotions Being able to identify unmet needs and express them Expressing the overall body image  Discussing the concept of "femininity (being a woman)" with group members. Allowing group members to openly express their feelings regarding femininity Encouraging group members to openly express their feelings regarding femininity Encouraging group members to openly express their feelings about their bodies as women  Recognizing challenging emotions related to loss Developing the ability to manage recognized challenging emotions Perceiving oneself as a whole Developing self-compassion  Loving one's body and accepting the losses  Accepting one's limitations Overcoming difficulties in self-	Providing information about homework Summarizing the session Allowing group members to share their feelings and thoughts about the session Demandate or ecognize suppressed emotions Being able to recognize suppressed emotions Being able to dentify unmet needs and express them Expressing the overall body image  Discussing the concept of "femininity (being a woman)" with group members to openly express their feelings regarding femininity Encouraging group members to openly express their feelings about their bodies as women  Recognizing challenging emotions related to loss Developing the ability to manage recognized challenging emotions related to loss Developing the ability to manage recognized challenging emotions Developing the ability to manage recognized challenging emotions Developing the ability to manage of Developing self-compassion  Loving one's body and accepting the losses  Loving one's body and accepting the losses on the losses on the losses on the losses on the los	Perceive their bodies as a whole  - Providing information about homework - Summarizing the session - Allowing group members to share their feelings and thoughts about the session - One-minute silence practice - Emotion-mood regulation - Briefly reviewing the previous session - Sharing homework assignments - Expressing the overall body image - Providing information about the agenda - "Silent Scream" exercise - Tree Meditation - Providing information about the agenda - "Silent Scream" exercise - Tree Meditation - Providing information about the session - Allowing group members to share their feelings and thoughts about the session - One-minute silence practice - Emotion-mood regulation - Providing information about the session - Allowing group members to share their feelings and thoughts about the session - One-minute silence practice - Playing the "Waterfall" game - Providing information about the session - Naminute silence practice - Playing the "Waterfall" game - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing information about the session - Naminute silence practice - Providing informa

loss can manifest in different ways. For example, a woman with breast cancer may react to losing her feminine shape, while a woman with uterine cancer may feel that she is no longer a real woman [38]. In gynecological cancers, many women experience symbolic losses during the treatment process that distance them from their feelings of womanhood. Women may use negative descriptions of their bodies as asymmetrical, deficient, or shattered. Surgical and medical interventions can affect reproductive capacity, leading to issues such as feeling incomplete,

inadequate, and flawed, decreased body image and self-esteem, reluctance to enter new intimate relationships with the opposite sex, and a sense of being unable to complete their family [5,7,8,11-14,39].

There are several studies in the literature that have been conducted with gynecologic cancer patients, involving both individual and group interventions. Many of these studies have addressed issues such as sexual dysfunction, quality of life, treatment side effects,

Table 2. (continued) Femininity Identity Improvement Program.

Session 8: Self- Esteem	Identifying negative beliefs and distortions about femininity     Highlighting strengths     Identifying areas open to empowerment     Enhancing the individual's adaptability	Emotion-mood regulation     Briefly reviewing the previous session     Sharing homework assignments     Providing information about the agenda     A brief presentation on cognitive distortions     Sharing cognitive distortions related to femininity by group members     Role-play to expose cognitive distortions     Greeting practice     Informing about homework assignments     Summarizing the session     Allowing group members to share their thoughts and feelings about the session     One-minute silence practice	90-120 minutes	-
Session 9: Self- Esteem	Building self- confidence     Enhancing self- esteem	Emotion-mood regulation     Briefly reviewing the previous session     Sharing homework assignments     Informing about the agenda     "I Have My Basket with Me, I'm Going Shopping" activity     Providing information about homework     Summarizing the session     Allowing group members to share their feelings and thoughts about the session     One-minute silence practice	90-120 minutes	Cardboard-made baskets, colored cardstock, scissors, glue, pencil
Session 10: Hope and the Purpose of Life	Instilling hope     Determining life purposes     Concluding the group process	Emotion-mood regulation     Briefly reviewing the previous session     Sharing homework assignments     Informing about the agenda     "Our Garden" activity     Creating a "Goals Poster" using the "Sentence Completion Game"     Summarizing the session     Allowing group members to share their feelings and thoughts about the session     One-minute silence practice	90-120 minutes	Canvas suitable for painting (American cloth), brushes of various thicknesses, oil paint, acrylic paint, disposable protective apron, glue

menopause, body image, levels of anxiety and depression, coping skills, sleep quality, and marital satisfaction in women [7,39-45]. In our country, interventions have been conducted for individuals diagnosed with genital organ cancer to assess their reactions to cancer, body image, coping, and psychosocial adaptation. These interventions have included progressive muscle relaxation exercises and reflexology applications for patients undergoing chemotherapy, nursing care based on Watson's Human Caring Theory to assess the impact on anxiety, depression, and quality of life, reflexology applications based on Watson's Human Caring Model to evaluate the effect on chemotherapy symptoms, as well as studies aimed at determining the effects of logotherapy-based life meaning interviews on traumatic stress symptoms, post-traumatic growth, finding meaning in life, and spiritual well-being [46-50]. However, none of the previous studies have addressed the concept of prolonged grief disorder associated with perceived or realized losses related to femininity identity. Additionally, in these studies, no group interventions were found to be based on cognitive-behavioral and expressive techniques. The concept of "improving femininity identity" is being introduced for the first time in this study with gynecologic cancer patients. In the Femininity Identity Improvement Program prepared by the researchers in line with the literature, various expressive techniques such as art, writing, role-playing, guided imagery, along with cognitive-behavioral techniques, are used within the framework of psychiatric nursing roles. Two separate psychotherapeutic interventions are integrated in an innovative approach, contributing to psychiatric nursing practice. This research, as a single-blind randomized controlled trial, may provide evidence-based guidance to psychiatric nursing.

#### Limitations

The research results are only applicable to gynecological cancer patients between the ages of 18-65 who were included in the study. Limitations of the research include the recruitment of patients from only one university hospital, the exclusion of illiterate patients from

the study, and the restriction of the intervention program to ten sessions in a group setting.

# **Funding**

All materials to be used in the group intervention of the study will be provided by the researchers. No financial support was received for the study.

# Conflict of interest

There is no conflict of interest between the authors.

# Acknowledgment

This study protocol belongs to the author Kevser Pamuk's doctoral thesis.

#### References

- 1. Yilmaz M, Yazgi ZG. Nursing role in coping with psychosocial problems experienced by cancer patients [in Turkish]. Adnan Menderes Üniversitesi Sağlık Bilim Fakültesi Derg. 2020;4:60–70.
- World Health Organization. (2022, 3
   February). Cancer. Retrieved from <a href="https://www.who.int/news-room/fact-sheets/detail/cancer.">https://www.who.int/news-room/fact-sheets/detail/cancer.</a>
- 3. Siegel RL, Miller KD, Wagle NS, Jemal A. Cancer statistics, 2023. CA Cancer J Clin. 2023;73:17–48. doi: 10.3322/caac.21763.
- 4. T.C. Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü Kanser Dairesi Başkanlığı. (2022). Cancer statics [in Turkish]. Retrieved from <a href="https://hsgm.saglik.gov.tr/tr/kanser-istatistikleri.html">https://hsgm.saglik.gov.tr/tr/kanser-istatistikleri.html</a>.
- Reis N, Beji NK, Coskun A. Quality of life and sexual functioning in gynecological cancer patients: Results from quantitative and qualitative data. Eur J Oncol Nurs. 2010;14:137–46. doi: 10.1016/j. ejon.2009.09.004.
- 6. Abbott-Anderson K, Young PK, Eggenberger SK. Adjusting to sex and intimacy: Gynecological cancer survivors

- share about their partner relationships. J Women Aging. 2020;32:329–48. <u>doi:</u> 10.1080/08952841.2019.1591888.
- 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;29:437–43. doi: 10.1002/pon.5284.
- 8. Akyüz A, Güvenç G, Ustünsöz A, Kaya T. Living with gynecologic cancer: Experience of women and their partners. J Nurs Scholarsh. 2008;40:241–7. doi: 10.1111/j.1547-5069.2008.00232.x.
- 9. Komatsu H, Yagasaki K, Shoda R, Chung Y, Iwata T, Sugiyama J, et al. Repair of the threatened feminine identity: Experience of women with cervical cancer undergoing fertility preservation surgery. Cancer Nurs. 2014;37:75–82. doi: 10.1097/NCC.0b013e3182888c13.
- Anuk D. The Effect of body image concerns, anxiety, and depression on sexual problems in gynecological cancer patients. Turk J Oncol. 2022. doi: 10.5505/tjo.2022.3541.
- 11. Rasmusson E-M, Thomé B. Women's wishes and need for knowledge concerning sexuality and relationships in connection with gynecological cancer disease. Sex Disabil. 2008;26:207–18. doi: 10.1007/s11195-008-9097-5.
- 12. Sekse RJT, Råheim M, Gjengedal E. Shyness and openness Common ground for dialogue between health personnel and women about sexual and intimate issues after gynecological cancer. Health Care Women Int. 2015;36:1255–69. doi: 10.1080/07399332.2014.989436.
- La Rosa VL, Shah M, Kahramanoglu I, Cerentini TM, Ciebiera M, Lin L-T, et al. Quality of life and fertility preservation counseling for women with gynecological cancer: An integrated psychological and clinical perspective. J Psychosom Obstet Gynecol. 2020;41:86–92. doi: 10.1080/0167482X.2019.1648424.

- 14. Boding S-A, Hutchinson A, Webb SN. Factors that influence self-identity in women who have undergone gynecological cancer treatment. Womens Reprod Health. 2022;0:1–18. doi: 10.1080/23293691.2022.2124139.
- 15. Uceda-Escobar A, Guerra-Martín MD, Botello-Hermosa A. The perceptions of women with gynecological cancer after radiotherapy treatment: A gender-based qualitative study. Healthcare. 2023;11:1580. doi: 10.3390/healthcare11111580.
- 16. Hall P, Weaver L, Willett TG. Addressing suffering through an inter-professional online module: Learning with, from, and about each other. J Palliat Care. 2011;27:244–6.
- 17. Gökler Danişman I, Yalçinay M, Yildiz N. Measuring grief symptoms in cancer patients: The reliability and validity study of the turkish version of prolonged grief disorder scale [in Turkish]. Türk Psikiyatri Derg 2017;28:190–7.
- 18. Falzarano F, Prigerson HG, Maciejewski PK. The role of advance care planning in cancer patient and caregiver grief resolution: Helpful or harmful? Cancers. 2021;13:1977. doi: 10.3390/cancers13081977.
- Gökler-Danışman I, Yalçınay-İnan M, Yiğit İ. Experience of grief by patients with cancer in relation to perceptions of illness: The mediating roles of identity centrality, stigmainduced discrimination, and hopefulness. J Psychosoc Oncol. 2017;35:776–96. doi: 10.1080/07347332.2017.1340389.
- 20. Embel N. CN23 Investigation of grief process on patients with cancer. Ann Oncol. 2021;32:S1264. doi: 10.1016/j. annonc.2021.08.648.
- 21. AntoniMH, Lehman JM, Kilbourn KM, Boyers AE, Culver JL, Alferi SM, et al. Cognitive-behavioral stress management intervention decreases the prevalence of depression and enhances benefit finding among women under treatment for early-stage breast cancer. Health Psychol. 2001;20:20-32. doi: 10.1037//0278-6133.20.1.20.

- 22. Quesnel C, Savard J, Simard S, Ivers H, Morin CM. Efficacy of cognitive-behavioral therapy for insomnia in women treated for nonmetastic breast cancer. J Consult Clin Psychol. 2003;71:189-200. doi: 10.1037/0022-006X.71.1.189.
- 23. Savard J, Simard S, Ivers H, Morin CM. Randomized study on the efficacy of cognitive-behavioral therapy for insomnia secondary to breast cancer, part I: Sleep and psychological effects. J Clin Oncol. 2005;23:6083-96. doi: 10.1200/ ICO.2005.09.548.
- 24. Piet J, Würtzen H, Zachariae R. The effect of mindfulness-based therapy on symptoms of anxiety and depression in adult cancer patients and survivors: A systematic review and meta-analysis. J Consult Clin Psychol. 2012;80:1007–20. doi: 10.1037/a0028329.
- 25. Feros DL, Lane L, Ciarrochi J, Blackledge JT. Acceptance and Commitment Therapy (ACT) for improving the lives of cancer patients: A preliminary study. Psychooncology. 2013;22:459-64. doi: 10.1002/pon.2083.
- 26. Dixie Meyer, (Editors: Suzanne Degges-White, Nancy L. Davis, Hayal Demirci, Translate: Nurdan Cihanşümül Maral). Bilişsel davranışçı terapi. dışavurumcu sanatın psikolojik danışma uygulamalarına entegrasyonu teoriye dayalı müdahaleler [in Turkish]. Ankara: Nobel Yaşam; 2019. 45–64 p.
- 27. Onal AA, Yalçın İ. A review on handling grief process in group counseling [in Turkish]. Türk Psikolojik Danışma ve Rehberlik Dergisi. 2019;9(55):1013-1051.
- 28. Bell JG, McHale J, Elliott JO, Heaton W. The impact of art therapy on anxiety and hope in patients with gynecologic cancer undergoing chemotherapy. Arts Psychother. 2022;80:101947. doi: 10.1016/j.aip.2022.101947.
- 29. Yuan Y, Liu X, Yin C, Shi L, Ye X. Cognitive behavioral stress management is an effective intervention to relieve anxiety and depression, improve the quality of life in patients with cervical cancer. Ir J Med Sci. 1971 2023. doi: 10.1007/s11845-023-03501-8.

- 30. Eren N. Importance of art therapy and the art for care in psychiatry [in Turkish]. Turkiye Klinikleri J Psychiatr Nurs-Special Topics. 2015;1:95–104.
- 31. Akin B, Koçoğlu-Tanyer D. SPIRIT 2013 statement: Defining standard protocol items for clinical trials [in Turkish]. Hacet Üniversitesi Hemşire Fakültesi Derg 2021;8:117–27. doi: 10.31125/hunhemsire.908072.
- 32. Boutron I, Altman DG, Moher D, Schulz KF, Ravaud P, for the CONSORT NPT group. consort statement for randomized trials of nonpharmacologic treatments: A 2017 update and a CONSORT extension for nonpharmacologic trial abstracts. Ann Intern Med. 2017;167:40. doi: 10.7326/M17-0046.
- 33. Whitehead AL, Julious SA, Cooper CL, Campbell MJ. Estimating the sample size for a pilot randomised trial to minimise the overall trial sample size for the external pilot and main trial for a continuous outcome variable. Stat Methods Med Res. 2016;25:1057-73. doi: 10.1177/0962280215588241.
- 34. Cohen J. Statistical power analysis for the behavioral sciences. 2nd ed. Hillsdale, N.J. L. Erlbaum Associates; 1988.
- 35. Canada AL, Schover LR. The psychosocial impact of interrupted childbearing in long-term female cancer survivors. Psychooncology. 2012;21:134-43. doi: 10.1002/pon.1875.
- 36. Halmatov S. Art therapy painting techniques metaphors and symbols [in Turkish]. 3. Baskı. Ankara: Pegem Akademi; 2021.
- 37. Yurdugül DH. Using content validity indices for content validity in scale development studies [in Turkish]. In: XIV. National Educational Sciences Congress. Pamukkale University Faculty of Education. 28-30 Eylül 2005, Denizli, Türkiye.
- 38. Elisabeth K.R. On death and dying [in Turkish]. 1. Edition. Çankaya, Ankara: A.P.R.I.L Publishing; 2010.
- 39. Zhang L, Gu W, Zhang L, Miao R, Jing X, Zhi S, et al. The effects of a nurse-led couples intervention on marital quality

- of couples with gynecological cancer: A clinical randomized controlled trial. Gynecol Oncol. 2022;165:629–36. doi: 10.1016/j. ygyno.2022.03.010.
- 40. Caldwell R, Classen C, Lagana L, McGarvey E, Baum L, Duenke SD, et al. Changes in sexual functioning and mood among women treated for gynecological cancer who receive group therapy: A pilot study. J Clin Psychol Med Settings. 2003;10:149-56. doi: 10.1023/A:1025402610404.
- 41. Levine EG, Silver B. A Pilot Study: Evaluation of a psychosocial program for women with gynecological cancers. J Psychosoc Oncol. 2007;25:75-98. doi: 10.1300/J077v25n03\_05.
- 42. Brotto LA, Heiman JR, Goff B, Greer B, Lentz GM, Swisher E, et al. A psychoeducational intervention for sexual dysfunction in women with gynecologic cancer. Arch Sex Behav. 2008;37:317-29. doi: 10.1007/s10508-007-9196-x.
- 43. Sun L, Tao Y, Zhu S, Liu K. A randomized controlled trial of WeChat-based cognitive behavioral therapy intervention to improve cancer-related symptoms in gynecological cancer survivors: Study protocol. BMC Health Serv Res. 2022;22:1052. doi: 10.1186/s12913-022-08443-v.
- 45. Wang H, Gao X, Chen N. Psychological nursing effect of patients with gynecological malignant tumor. BioMed Res Int. 2022;2022:1569656.doi:10.1155/2022/1569656.
- 46. Hallac S. To evaluated of group intervention on mental adjusment to cancer, body image, coping and psychosocial adjusment of patients with genital organ cancer [in Turkish]. Hacettepe University Institute of Health Siences Psychiatric Nursing Program Doctoral Thesis, Ankara, 2010.

- 47. Alan H. Effect of progressive muscle relaxation exercises and reflexology applied during chemotherapy treatment on pain, fatigue, anxiety, depression, and gynecologic cancer patients' quality of life in randomized control study [in Turkish]. Hacettepe University, Institute of Health Sciences, Department of Gynecology and Obstetrics, Phd Thesis, Ankara, 2015.
- 48. Teskereci G. Evaluate the effectiveness of the nursing care program based on Watson' Theory of Human Caring to chemotherapy symptoms, hope and meaning in life status of women who has gynecological cancer [in Turkish]. Doctoral Thesis. Akdeniz University, Institute of Health Sciences, Department of Nursing, 2016.
- 49. Türkcü SG. Examination of the effects of reflexology based on Watson's Theory of Human Caring on anxiety, depression, and quality of life in gynecological cancer patients [in Turkish]. Pamukkale University, Institute of Health Sciences, PhD Thesis in Nursing 2019.
- 50. Aydın R. the effect of Logotherapy-based interviews on attributing meaning to life provided by a nurse to women diagnosed with gynecological cancer on traumatic stress symptoms, posttraumatic growth, meaning in life, and spiritual well-being [in Turkish]. Doctoral Thesis. Akdeniz University, Institute of Health Sciences, Department of Nursing, 2020.