



Brakiterapi Alan Serviks Kanseri Kadınlara Hemşirenin Verdiği Danışmanlığın Cinsel İşlev Üzerine Etkisi; Kapsam İncelemesi

Effects of Nurse Counseling on Women with Cervical Cancer Receiving Brachytherapy on Sexual Function: A Scoping Review

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ÖZET

Amaç: Günümüzde, serviks kanseri kadınlarda cinsel rehabilitasyonun, klinik bakımda rutin kullanımının gerekliliği öne çıkmaktadır. Hemşireler tarafından verilecek psikoseksüel danışmanlık ile hastaların cinsel işlev sorunlarının önemli düzeyde iyileştirilebileceği belirtilmektedir. Bu kapsamda, brakiterapi alan serviks kanseri kadınlara hemşirenin verdiği danışmanlığın cinsel işlev üzerine etkisinin incelemek amacıyla kapsam analizi yapılmıştır. **Yöntem:** Brakiterapi tedavisi alan serviks kanseri kadınlara hemşirenin verdiği danışmanlığın cinsel işlev sorunlarına yönelik etkisi ile ilgili mevcut kanıtları derlemek ve değerlendirmek için bir kapsam incelemesi yapıldı. Çalışma popülasyonu, brakiterapi alan serviks kanserli kadınlardan oluşmaktadır. Derlemeye 01.01.2000-02.03.2021 tarihine kadar İngilizce olarak yayınlanan retrospektif, prospektif ve deneysel çalışmalar dahil edilmiştir. **Bulgular:** Dışlama ölçütleri uygulandıktan sonra 13 makalenin tam metni incelenmiş olup 5 tanesi araştırmaya dahil edilmiştir. Uygulanan hemşirelik girişimlerine bakıldığında cinsel terapi, psikoeğitim ve hemşirelik bakım müdahalesi bulunmaktadır. **Sonuç:** Brakiterapi alan serviks kanserli kadınlara hemşire tarafından verilen bakım uygulamalarının cinsel fonksiyonları üzerinde olumlu etkisi olduğu görülmüştür.

Anahtar Kelimeler: Brakiterapi, serviks kanseri, hemşirelik bakımı

ABSTRACT

Objective: Today, cervical cancer highlights the necessity of routine sexual rehabilitation in clinical care in women. It is stated that the sexual function problems of the patients can be significantly improved with the psychosexual counseling given by the nurses. In this context, a scope analysis was conducted to examine the effects of the counseling given by the nurse to women with cervical cancer receiving brachytherapy on sexual function. **Methods:** A scope review was conducted to compile and evaluate the available evidence for sexual dysfunction issues in nurse counseling to women with cervical cancer receiving brachytherapy treatment. The study population consisted of women with cervical cancer who received brachytherapy. Studies published in English until 01.01.2000-02.03.2021 were included in the compilation. **Results:** After applying the exclusion criteria, the full text of 13 articles were reviewed, and five of them were included in the present study. Considering the applied nursing interventions, there are sexual therapy, psychoeducation and nursing care intervention. **Conclusion:** The care practices given by the nurse had a positive effect on the sexual functions of women with cervical cancer receiving brachytherapy.

Keywords: Brachytherapy, cervical cancer, nursing care

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INTRODUCTION

Cervical cancer is one of the malignant tumors affecting women's health (Li et al., 2016) and is common among women (Dunyo et al., 2018). According to the World Cancer Report, cervical cancer is the fourth most common cancer type in incidence and mortality in women worldwide, with an estimated 570,000 new cases and 311,000 deaths in 2018. It ranks first among gynecological cancers regarding incidence (WHO, 2020). In the 2016 data of Cancer Statistics of Turkey, it is stated that cervical cancer starts between 20 and 24 and has a high incidence between 40 and 80 ages (T.C. Sağlık Bakanlığı, 2019). Women diagnosed with cervical cancer are mainly in the sexually active period, which makes the effects of cancer and its treatment on sexual health important (Shankar et al., 2020).

In the treatment of cervical cancer, radiation therapy in surgery, chemotherapy, external beam radiotherapy and vaginal brachytherapy plays an important role (Huffman et al., 2016). After pelvic radiotherapy, 30-63% of women have sexual dysfunction (Jensen and Froeding, 2015; Sadovsky et al., 2010; Shankar et al., 2020) as well as changes in the woman's body image, dryness, sexual dissatisfaction, pain during intercourse and vaginal bleeding (Vermeer et al., 2016). Cervical cancer highlights the necessity of routine sexual rehabilitation in clinical care in women (Finocchiaro-Kessler et al., 2016). Nurses who come to the forefront within the scope of education and counseling role in this process provide patients with information, facilitate their adaptation to changes as psychological support, and help them in decision-making. It is stated that the sexual function problems of the patients can be significantly improved with the psychosexual counseling given by the nurses (Afiyanti et al., 2016). In addition, it is reported that nursing care interventions increase the physical health of the individual and reduce the distress, pain and fatigue experienced after radiotherapy (Olesen et al., 2016). Given the prevalence of sexual function problems in women with cervical cancer receiving brachytherapy treatment and the importance of counseling by the nurse in this context, proof should be created by reviewing the studies on the subject. In this context, a scope analysis was conducted to examine the effects of the counseling given by the nurse to women with cervical cancer receiving brachytherapy on sexual function.

METHODS

Review Type

A scope review was conducted to compile and evaluate the available evidence for sexual dysfunction issues in nurse counseling to women with cervical cancer receiving brachytherapy treatment. Scope review is a form of knowledge synthesis that aims to map research and types of evidence relevant to the identified field by systematically searching, selecting and synthesizing available knowledge. It is especially beneficial when an area is complex and has not been reviewed in detail before (Colquhoun et al., 2014). In this research, drawing on Arksey and O'Malley's frameworks for the scope analysis, the stages of determining the research question, determining the studies related to the research, selecting the studies, showing the data inclusion process in the flow diagram, compiling and summarizing the results were used (Arksey and O'Malley, 2005).

Stage 1- Determining the Research Question

The following research questions were identified while collecting the evidence surrounding the effects of nurse counseling on women with cervical cancer receiving brachytherapy treatment on sexual dysfunction.

Research Questions

- 1.What is the current evidence regarding the effects of counseling given by nurses to women with cervical cancer receiving brachytherapy treatment on sexual function?
- 2.What are the effects of counseling given by nurses to women with cervical cancer receiving brachytherapy treatment on improving their sexual function?

Stage 2- Identifying Relevant Studies

The content of MeSH (Medical Subjects Headings) and was used as English keywords. In this context, “Brachytherapy or, Radioisotope Brachytherapy or, Curietherapy or, Radioisotope or, Plaque Therapy or, Surface Radiotherapy or, Intracavity Radiotherapy or, Interstitial Radiotherapy or, Implant Radiotherapy;” “Uterine Cervical Neoplasms or, Cancer of Cervix or, Cancer of the Cervix or, Cancer of the Uterine Cervix or, Cervical Cancer or, Cervical Neoplasms or, Cervix Cancer or, Cervix Neoplasms or, Neoplasms or, Cervical or, Neoplasms or, Cervix or, Uterine Cervical Cancer;” “Sexuality or, Sexual Partners or, Pain or, Orgasm or, Coitus or, Sexual Behavior or, Libido or, Atrophy or, Vagina or, Vaginismus or, Vulva or, Dyspareunia or, Women or, Female or, Genitalia or, Burns or, Diagnosis or, Lubrication or, Sexual Dysfunctions;” “Sex Counseling or, Counseling, Sex or, Sex Counselings;” “Education, Sex or, Family Planning Training or, Training, Family Planning or, Education, Family Planning;” “Education, Health or, Community Health Education or, Education, Community Health or, Health Education, Community” were searched as keywords. Pubmed, Google Scholar, ScienceDirect and Web of Science databases were used as databases to search the keywords. All databases were screened between 01.01.2000-02.03.2021.

Stage 3- Study Selection

The study population consisted of women with cervical cancer who received brachytherapy. Studies published in English until 01.01.2000-02.03.2021 were included in the compilation. Retrospective, prospective and experimental studies were included in the present research but descriptive studies, qualitative studies, letters to the editor, thesis, protocol, congress papers, studies published outside the 01.01.2000-02.03.2021 date range and in a language other than English were not included. The search of the publications related to the subject was carried out with a retrospective electronic search in the relevant databases.

Stage 4- Showing the Data Inclusion Process in a Flowchart

Identification and selection of studies were made independently by two researchers. In cases where there was a difference of opinion among the researchers, a consensus was reached by discussion. In the first step, studies eligible for the scope of this research were searched based on the study title in the databases and recorded through the EndNote X9 program; in the second step, the abstracts were evaluated according to the inclusion criteria and the full texts of the studies that met the criteria were examined. The steps in the scanning process are shown in the

flow chart recommended to be used in the literature (PRISMA 2009 Flow Diagram) (Moher, et al. 2009) (figure 1).

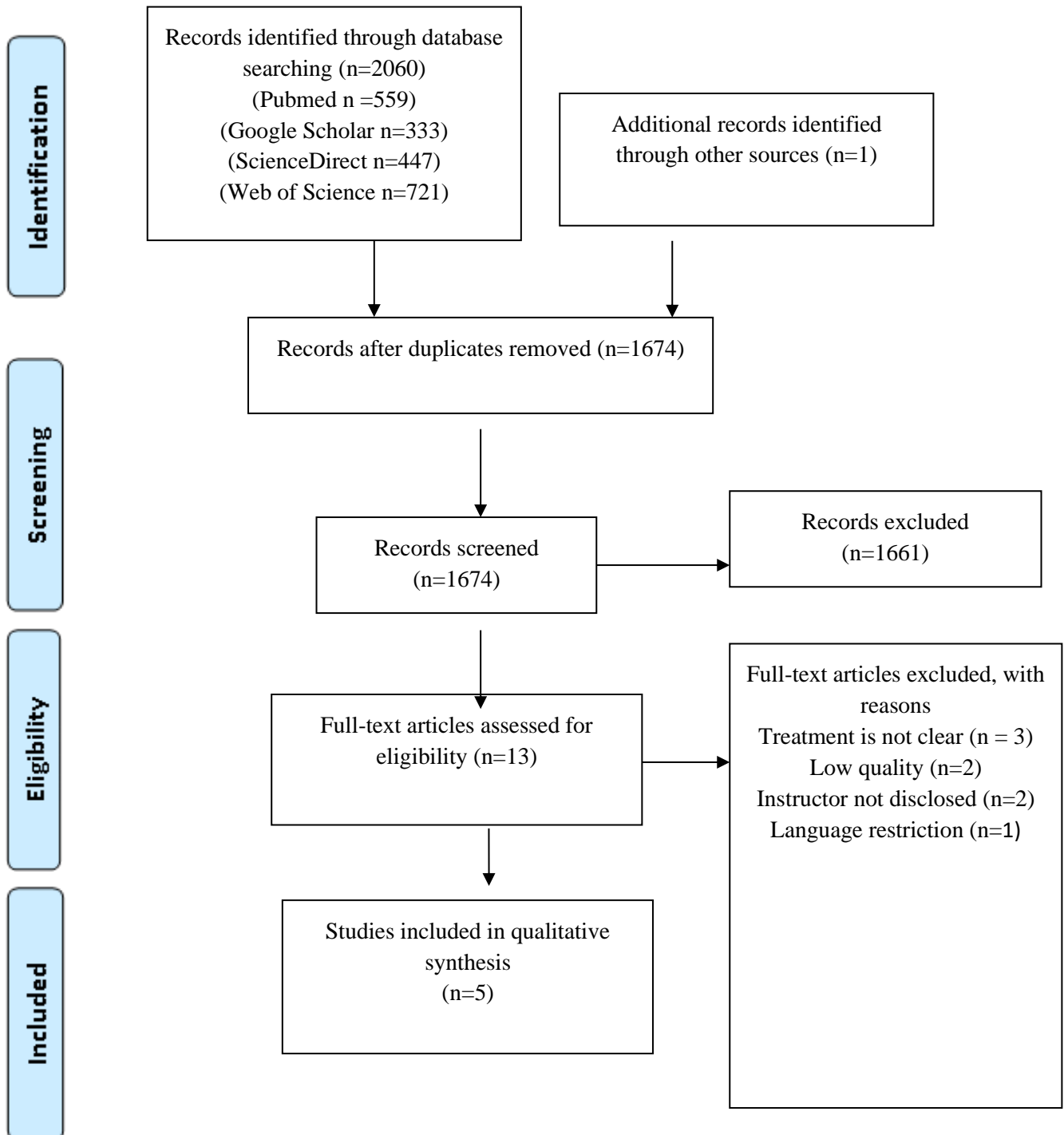


Figure 1- PRISMA 2009 Flow Diagram



The methodological quality of the studies was evaluated by the first researcher and checked by the second researcher. In the evaluation of the methodological quality of the studies, the "checklist for quasi-experimental studies," "checklist for randomized controlled trials" and "checklist for cohort studies" tools published by the Joanna Briggs Institute were used to evaluate the articles regarding reliability, relevance and results (JBI, 2020).

Items were evaluated as "yes (1 point), no (0 points), not specified (0 points), not appropriate (0 points)." A high score meant that the quality of the study was high (JBI, 2020). The data extraction tool developed by the researchers was used to obtain the research data. In the data extraction tool, the main results regarding the name, author, year, design, sample size, age of the women, medical treatment applied, nursing intervention applied and sexual function of the studies included in this study were included. Data extraction was addressed independently by the first researcher and controlled by the second researcher.

RESULT

After applying the exclusion criteria, the full text of 13 articles were reviewed, and five of them were included in the present study. The quality of five studies included with the Joanna Briggs Institute measurement tools was evaluated. One retrospective cohort study (Kpoghomou et al., 2021) 5 points out of 10, one quasi-experimental study (Afiyanti et al., 2016) 6 points out of 9 points, three other randomized controlled trials (Chow et al., 2014; Schofield et al., 2020; Shi, et al., 2020) scored between 5-7 out of 13 points. Detailed information about the studies is included in table 1 (Table 1).

Considering the applied nursing interventions, there are sexual therapy, psychoeducation and nursing care intervention. In a study evaluating the effects of positive psychology intervention applied by nurses, it was reported that the intervention was effective on sexual function and subjective well-being (Shi et al., 2020). In another study in which the results of the psychoeducational intervention given by the nurse were examined, it was stated that although the sexual function results did not differ between the two groups, the psychoeducational intervention program was applicable and may have beneficial effects in gynecological cancer patients (Chow et al., 2014). It is stated that sexual therapy administered by the nurse to patients can improve the resumption of sexual activity and reduce physical side effects, especially vaginal stenosis (Kpoghomou et al., 2021). In addition, it has been determined that it improves dyspareunia, sexual satisfaction, vaginal lubrication, orgasm (Afiyanti, et al. 2016) and is effective in improving the patient's compliance with vaginal self-care recommendations (Schofield et al., 2020).

Table 1. Features included in the research

Title of the study	Author (year)	Study type	Sample size (N)	Age	Cancer type	Medical treatment	Intervention	Main results
Assessment of an onco-sexology support and follow-up program in cervical or vaginal cancer patients undergoing brachytherapy	Kpoghomou et al. 2021	Retrospective	Experimental group =90 Control group =66	28-81	144 cervical, 12 vagina cancer	Pelvic external radiotherapy and intrauterine brachytherapy	Sexual therapy given by a nurse sexologist	It is stated that the intervention can improve the resumption of sexual activity and reduce physical side effects, especially vaginal stenosis.
Evaluating Sexual Nursing Care Intervention for Reducing Sexual Dysfunction in Indonesian Cervical Cancer Survivors	Afiyanti et al. 2016	Quasi-experimental	One group pretest-posttest n= 53	35-60	Cervical cancer	Chemoradiation	Nursing care intervention and education	Nursing care intervention; it is reported that it improves dyspareunia, sexual satisfaction, vaginal lubrication, sexual desire and orgasm.
A nurse- and peer-led psycho-educational intervention to support women with gynaecological cancers receiving curative radiotherapy: The PeNTAGON randomised controlled trial-ANZGOG 1102	Schofield et al. 2020	Randomized controlled trials	Experimental group =156 Control group =158	23-90	endometrium/ uterine 51%, cervical cancer41%	External radiotherapy, brachytherapy, chemotherapy	Nursing care intervention	The intervention was found to be more effective than the control group in improving the patient's sexual rehabilitation and compliance with vaginal self-care recommendations.
Effects of a nurse-led positive psychology intervention on sexual function, depression and subjective well-being in postoperative patients with early-stage cervical cancer: A randomized controlled trial	Shi et al. 2020	Randomized controlled trials	Experimental group =46 Control group =45	18-50	Cervical cancer	Chemotherapy, radiotherapy	Nursing care intervention	There were significant differences between groups in the scores of each dimension in the Female Sexual Function Index 3 and 6 months after the intervention.
A feasibility study of a psychoeducational intervention program for gynecological cancer patients	Chow et al. 2014	Randomized controlled trials	Experimental group =13 Control group =13	54,5	Cervical 6, uterine 13 and over cancer 7	Operation, Adjuvant therapy	Psychoeducational intervention given by a nurse	Although sexual function results did not differ between the two groups, a psychoeducational intervention program can be applied and may have beneficial effects in gynecological cancer patients.

DISCUSSION

It is seen that the survival rate of women affected by gynecological cancer has increased with the developments in oncology, radiotherapy and surgery (Barcellini et al., 2022). Urinary incontinence, anal incontinence, vaginal stenosis, vaginal dryness, dyspareunia, and sexual function also cause problems in women due to significant changes in the pelvic floor muscles by causing fibrosis in the smooth and striated muscle layer of the brachytherapy applied in this process (Zomkowski et al., 2016). In the scope analysis based on these problems, the effects of the counseling given by the nurse to the women with cervical cancer receiving brachytherapy on sexual function were examined.

The findings obtained in previous studies revealed that the care practices given by the nurse had a positive effect on the sexual functions of women with cervical cancer receiving brachytherapy (Afiyanti et al., 2016; Chow et al., 2014; Kpoghomou et al., 2021; Schofield et al., 2020; Shi et al., 2020). Similarly, in the literature, the importance of counseling delivered by the nurse to improve sexual function after radiotherapy in increasing the quality of sexual life has been emphasized (Schofield et al., 2020; Shi et al., 2020; Suvaal et al., 2021). Nurses' care interventions come to the fore in managing the side effects of radiotherapy, rehabilitation of patients, raising their quality of life and psychosocial well-being (Dunberger and Bergmark, 2012). In addition, the routine use of necessary information and support regarding sexuality issues in nursing care practices is recommended. In this context, it is reported that nurses need to be equipped with skills related to sexuality care and their awareness should be increased (Zeng et al., 2012).

Considering the nursing interventions applied to women with cervical cancer receiving brachytherapy, there are sexual therapy, psychoeducation and nursing care intervention. In addition, it has been reported in the literature that nursing training to be given on the use of vaginal dilators may also be effective in reducing sexual function problems. However, we should note that studies with a high level of evidence on the subject are needed (Bakker et al., 2017; Hanlon et al., 2018).

CONCLUSION

Given the negative effects of gynecological cancers on the sexual functions of women, there is a need for further studies with a high level of evidence examining the effects of the counseling delivered by the nurse to women with cervical cancer receiving brachytherapy on sexual function. Further studies can guide the care to be administered to the patients, and the significance of developing the role of providing education and counseling on sexuality, which most nurses ignore, can be emphasized to improve the quality of life of women who have survived cervical cancer.

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Author contributions

Contribute to the emergence and maintenance of the article: EB, HEM

Plan, design: EB, HEM

Data collection / processing of collected data to prepare for analysis: EB, HEM

Data analysis: EB, HEM

Literature review: EB, HEM

Writing and corrections: EB, HEM

Checking and reviewing: HEM

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