

## ORIGINAL ARTICLE

## WOMEN IN PELVIC BRACHITERAPY: (UN)KNOWLEDGE AND PROFESSIONAL CARE AS MEANING

Érica Bernardes Duarte<sup>1</sup>, Luciana Martins da Rosa<sup>2</sup>, Vera Radünz<sup>3</sup>, Mirella Dias<sup>4</sup>, Rosimeri Helena da Silva<sup>5</sup>, Fernanda Lunardi<sup>6</sup>, Maira Roberta Pessi<sup>7</sup>

### ABSTRACT

**Objective:** to identify the meaning of brachytherapy in the narratives of women with genital cancer. **Method:** narrative research conducted at the *Centro de Pesquisas Oncológicas* (Santa Catarina/Brazil) with 32 women in pelvic brachytherapy. The narratives were collected, between September 2017 and July 2018, using semi-structured interviews submitted to content analysis.


**Results:** five thematic categories emerged from the speeches, in this study two of them are presented: (Un)knowledge about brachytherapy and Care by the professional team, which reveal the deficit of information about brachytherapy, the reports of other people negatively influencing the meaning of the therapy and, on the other hand, the infrastructure, the service of the team and the faith positively influencing.


**Conclusion:** the relevance of health education and professional care is evident, minimizing the physical and emotional effects resulting from therapy, positively impacting women's narratives.

**DESCRIPTORS:** Brachytherapy; Genital Neoplasms, Female; Nursing; Uterine Cervical Neoplasms; Personal Narrative.


### HOW TO REFERENCE THIS ARTICLE:


Duarte EB, Rosa LM da, Radünz V, Dias M, da Silva RH da Lunardi F, et al. Women in pelvic brachiterapy: (un) knowledge and professional care as meaning. *Cogitare enferm.* [Internet]. 2020 [access "insert day, month and year"]; 25. Available at: <http://dx.doi.org/10.5380/ce.v25i0.68406>.

<sup>1</sup>Nurse. Municipality of Florianópolis. Florianópolis, SC, Brazil. 


<sup>2</sup>Doctor of Nursing. Nursing and Graduate Nursing Care Management Professor at Universidade Federal de Santa Catarina. Florianópolis, SC, Brazil. 

<sup>3</sup>Nurse. Doctor of Nursing. Nursing Professor at Universidade Federal de Santa Catarina. Florianópolis, SC, Brazil. 

<sup>4</sup>Physiotherapist. Doctor of Medical Sciences. Universidade Federal de Santa Catarina. Florianópolis, SC, Brazil. 

<sup>5</sup>Nurse. Master of Nursing Care Management. Nurse at the Radiotherapy Outpatient Clinic of the Centro de Pesquisas Oncológicas. Florianópolis, SC, Brazil. 

<sup>6</sup>Nurse. Multi-professional Resident in Nursing. Universidade Federal de Santa Catarina. Florianópolis, SC, Brazil. 

<sup>7</sup>Nurse. Specialist in Occupational Nursing. Coordinator of the Radiotherapy Outpatient Clinic of the Centro de Pesquisas Oncológicas. Florianópolis, SC, Brazil. 

## **MULHERES EM BRAQUITERAPIA PÉLVICA: (DES)CONHECIMENTO E ATENÇÃO PROFISSIONAL COMO SIGNIFICADO**

### **RESUMO**

*Objetivo:* identificar o significado da braquiterapia nas narrativas de mulheres com câncer ginecológico.

*Método:* pesquisa narrativa realizada no Centro de Pesquisas Oncológicas (Santa Catarina/Brasil) com 32 mulheres em braquiterapia pélvica. Coletaram-se as narrativas, entre setembro de 2017 e julho de 2018, por entrevistas semiestruturadas submetidas à análise de conteúdo.

*Resultados:* das comunicações emergiram cinco categorias temáticas, neste estudo apresentam-se duas: (Des)conhecimento sobre a braquiterapia e Atendimento da equipe multiprofissional, que revelam o déficit de informações sobre a braquiterapia, os relatos de outras pessoas influenciando negativamente o significado da terapêutica e, opostamente, a infraestrutura, o atendimento da equipe e a fé influenciando positivamente.

*Conclusão:* evidencia-se a relevância da educação em saúde e da atenção profissional, minimizando os efeitos físicos e emocionais consequentes da terapêutica, impactando positivamente as narrativas das mulheres.

**DESCRITORES:** Braquiterapia; Neoplasias dos Genitais Femininos; Enfermagem; Neoplasias do Colo do Útero; Narrativa Pessoal.

## **MUJERES EN BRAQUITERAPIA PÉLVICA: (DES)CONOCIMIENTO Y ATENCIÓN PROFESIONAL COMO SIGNIFICADO**

### **RESUMEN:**

*Objetivo:* Identificar el significado de la braquiterapia en los testimonios de mujeres con cáncer ginecológico.

*Método:* Investigación narrativa, realizada en el Centro de Investigaciones Oncológicas (Santa Catarina/Brasil), con 32 mujeres en braquiterapia pélvica. Los testimonios fueron recogidos entre setiembre de 2017 y julio de 2018, mediante entrevistas semiestruturadas sometidas a análisis de contenido.

*Resultados:* De las comunicaciones surgieron cinco categorías temáticas, en este estudio serán presentadas dos: (Des)conocimiento sobre la braquiterapia y Atención del equipo multiprofesional, que revelan el déficit de información sobre la braquiterapia, los testimonios de otras personas influyendo negativamente en el significado de la terapéutica y, de manera opuesta, la infraestructura, la atención del equipo y la fe ejerciendo influencia positiva.

*Conclusión:* Se evidencia la relevancia de la educación en salud y la atención profesional, minimizando los efectos físicos y emocionales derivados de la terapéutica, impactando positivamente en los testimonios de las mujeres.

**DESCRIPTORES:** Braquiterapia; Neoplasias de los Genitales Femeninos; Enfermería; Neoplasias del Cuello Uterino; Narrativa Personal.

## INTRODUCTION

More than one million new cases of gynecological cancers occur worldwide every year<sup>(1)</sup>. Cervical cancer, endometrium, and ovaries are the most common malignancies that affect the genital area<sup>(2)</sup>.

Among these topographies, cervical cancer stands out, followed by the endometrium, given the high rates of incidence and consequences for women's health, related to sexual, psychological and social behavior. The worldwide incidence of cervical cancer is 569,847 new cases each year; in Brazil, 16,370 new cases. For cancer of the uterus body and ovaries, in the world and Brazil, the numbers are, respectively, 382,069 and 6,600 new cases and 295,414 and 6,150 new cases<sup>(1,3,4)</sup>.

Treatment-related changes can include body image disorders, decreased quality of life, depressive and anxiety disorders. For the control of genital cancers, surgical, chemotherapy and radiotherapy (teletherapy and brachytherapy) are widely indicated<sup>(5)</sup>.

High-dose-rate brachytherapy, which includes three to four insertions of ionizing radiation, performed in two weeks, stands out. The advantages of the high dose rate modality include the precise positioning of the source, shorter treatment time and less risk of exposure of professionals to radiation<sup>(6)</sup>.

At the Radiotherapy Outpatient Clinic of the Centro de Pesquisas Oncológicas (CEPON), a reference institution for cancer care in Santa Catarina (Brazil), women, not hysterectomized, submitted to pelvic brachytherapy perform the procedure under sedation/anesthesia, while hysterectomized patients are submitted to therapy without sedation and/or anesthesia. Since the beginning of the anesthetic intervention, in 2015, no study has been carried out to assess the pain perception and the meaning of brachytherapy.

There are records that, between 2010 and 2014, 695 women with cervical cancer, 166 with endometrial cancer, eight with vulva cancer, six with ovarian cancer, and five with vagina cancer, underwent radiotherapy in the study setting<sup>(7)</sup>.

Another factor that justifies this study is the lack of data and randomized clinical studies evaluating pain or discomfort in brachytherapy. The discomfort experienced by patients is a combination of multiple causes. It is noteworthy that the female reproductive system has a large number of nerve endings, and the anxiety is widely known as a side effect of the genital procedure<sup>(8)</sup>.

Thus, the objective was to identify the meaning of brachytherapy in the narratives of women with genital cancer.

## METHOD

Narrative research<sup>(9)</sup> carried out with women diagnosed with gynecological cancer and submitted to brachytherapy at CEPON, with or without sedation and/or anesthesia. The monthly attendance in the study scenario was approximately 12 women under sedation and five without sedation and/or anesthesia.

The selection of women was carried out sequentially and for convenience on the days of discharge from brachytherapy. The number of inclusions was defined by data saturation (absence of new elements, defined in data analysis)<sup>(10)</sup> plus two more interviews.

For the collection of the narratives, between September 2017 and July 2018, semi-structured interviews, recorded and transcribed, were performed when discharged from

brachytherapy in a nursing office. The objective questions investigated sociodemographic data, clinical data and medication prescription for pain control (extracted from the patient's medical record) and pain assessment before, during and after brachytherapy.

The open questions investigated the meaning of pain and brachytherapy. The triggering questions were: "What did it mean for you to need brachytherapy?", "What did you feel during the treatment?" Complementary questions were included, whenever necessary, to explore the time dimension (how past experiences influenced the current reality); social dimension (how personal/social/cultural experiences impact the narrative); and environment dimension (how the environment impacts the narrative)<sup>(9)</sup>.

The speeches were submitted to content analysis<sup>(10)</sup>, which included pre-analysis, material exploration, application of the sequential rules, and processing of the results.

From the analysis of the narratives, five thematic categories emerged: (Un)knowledge about brachytherapy; Reasons for treatment; Impaired comfort; Care by the professional team; and pain perception of brachytherapy. In this study, the presentation of the thematic categories will be limited to the categories (Un)knowledge about brachytherapy and Care by the professional team. The sociodemographic and clinical characterization of the participants (topography, cancer staging and therapeutic scheme) will also be presented.

For the anonymity of the participants, the MB1-MB32 coding was adopted. Ethical approval registered under opinions/amendment 2570587 (04/02/2018) and 2650136 (05/11/2018).

## RESULTS

Inclusions totaled 32 participants, 20 (62%) performed the procedure with sedation/anesthesia, 12 (38%) without sedation and/or anesthesia; the average age was 51 years; the majority, in both groups, married, 17 (53%); Catholic, 24 (75%); with complete elementary school, from Greater Florianópolis, North and South Region of Santa Catarina, with respectively 10 women (31%) in each of these variables; diagnosed with cervical cancer, 26 (81%) (Table 1).

Table 1 - Sociodemographic data and topography of cancers in women undergoing brachytherapy with and without sedation/anesthesia. Florianópolis, SC, Brazil, 2018 (continues)

Sociodemographic data	Without sedation (n=12)	With sedation (n=20)	With and without sedation (n=32)	
	n	n	n	%
Age (years)				
Minimum-maximum age	40-77	25-62	25-77	-
Average age	57	46	51	-
Marital status				
Married/domestic partnership	8	15	23	72
Separated/divorced	3	0	3	9
Single	0	4	4	13
Widow	1	1	2	6

Religion				
Catholic	11	13	24	75
Evangelical	1	6	7	22
None	0	1	1	3
Schooling				
None	0	1	1	3
Elementary school (complete and incomplete)	8	8	16	51
Middle school (complete and incomplete)	1	2	3	9
High school (complete and incomplete)	2	6	8	15
Higher education (complete and incomplete)	1	3	4	12
Region of origin				
North	6	4	10	32
Greater Florianópolis	2	8	10	32
South	4	5	9	27
Other regions	0	3	3	9
Topography of cancer				
Cervix	6	20	26	81
Endometrium	6	0	6	19

Of the women who underwent brachytherapy without sedation/anesthesia, three (9%) underwent surgery and brachytherapy; three (9%) surgery, teletherapy and brachytherapy; and nine (27%) surgery, teletherapy, chemotherapy and brachytherapy. The therapeutic regimen of 20 (62%) women undergoing brachytherapy with sedation/anesthesia included brachytherapy, teletherapy and chemotherapy.

Of the staging (FIGO- International Federation of Gynecology and Obstetrics), 10 (32%) cases in stage I, 12 (37%) II, six (19%) III, two (6%) IV, two (6%) cases without records on this information.

### **(Un)knowledge about brachytherapy**

The speeches in this thematic category show that more than half of the women (18–56%) were unaware of brachytherapy before being sent to the study setting, which caused fear and anxiety (coding in the material exploration: previous deficit of information about the treatment).

*I was scared, shaken because I didn't know what brachytherapy was. The first time, we came without knowing anything. I remember that when they explained it, I was very nervous. My sister who accompanied me could understand it better. (MB08)*

*I didn't know what it was like, so I tried to search the internet to see if I would find out anything, [...]. I was a little scared because I didn't know what it was like if I would be sedated, I didn't know if it would hurt, if it wouldn't. (MB11)*

The speeches grouped registration units that portray the deficit of information offered by professionals regarding treatment, disease prognosis, side effects and post-

brachytherapy related care, and on the right to decide on treatment (coding in the material exploration: the right to information and decision).

*[...] one thing I can't understand is just taking exams, exams, exams and they say that everything was fine. But the fact of doing this, and that, it is because something is wrong, nobody comes here for nothing. This I will say to the doctor when I get back there and she will have to explain to me why I am going through all this. (MB24)*

*According to the doctor who did my surgery, I didn't need to have done anything and the other said that I had to do everything, and today [on the last day of treatment] I heard that I will have to go through treatment for the rest of my life because of brachytherapy, and nobody ever spoke to me about this. And only today they explained to me that I will have to do physiotherapy [use of a vaginal dilator to prevent stenosis] for the rest of my life. I think it was my right to know this before, to decide whether or not I was going to do brachytherapy. Because if I said I didn't want to, it was my choice. But they only told me about it today. (MB06)*

Speeches of other women's experiences with brachytherapy were grouped, influencing feelings, such as fear, anxiety and insecurity, making the beginning of the therapeutic process more traumatic for these women (coding in the material exploration: opinions and reports that cause fear and anxiety).

*When I came to do it, everyone told me a lot of things, on the first day I was tense, afraid, because: 'oh because of this'; 'Oh because of that'; a lot of things, but it's nothing like what they say, it was totally different, you don't feel anything, it's not all that. I thought I was going to get my vagina all hurt, that I was going to be hurting, but there was none of that. (MB01)*

*I thought it was something like that, a big deal, you know? ... because we talk to people, they say one thing, the other person says another. When I got here, it was totally different. (MB12)*

They revealed the encouragement, information, support, or advice provided by 29 (91%) participants to other women in brachytherapy (coding in the material exploration: advice for other women).

*[...] I even got the phone number [from another patient] and we are talking, [...] There were people there, that I would kiss and give love and say: 'Be strong, God will help you', always with a friendly message, like that. (MB16)*

*I would say to believe in our cure, because only this way we will be healed, and that it is hard, but to be strong, because it is a bad thing to go through, but we have to be strong, right? (MB04)*

## **Care by the multiprofessional team**

This category groups registration units that point out the participants' opinions about the professionals, infrastructure and care received (coding in the material exploration: considerations about the team and infrastructure).

*The way doctors, nurses, receptionists treat me here is great, they're all wonderful, because if we are sick and still find a disrespectful, rude person, then it kills us ahead of time. (MB16)*

*[...] the treatment here is special [...] I was very well attended, and they never told me to wait, they never treated me in a rude way, [...] this treatment was essential for me here. It was a life experience. [...] I was very well treated. We miss it when we leave, you know? Because here we feel like family, we have friends, doctors, nurses, I feel like that, people help each other a lot. (MB13)*

They reveal the care recommendations received in nursing consultations related to brachytherapy and the care provided (coding in the material exploration: nursing care: guidelines and constancy).

*Look, she [the nurse] told me to use chamomile tea twice a day, then I wash it [the vaginal canal] ... they gave me the douche, which I had never used and even taught me [how to use] because I didn't even know ... then she also asked me to drink stonebreaker tea, in case I had burning urine, but I don't. Only in the first, after removing the tube that it burned a little. [...] She guided me very well and I did everything she recommended. At this time [new consultation] she asked me to continue with the douche for another week if I don't have a discharge, or for another 14 days, twice a week, if there is a discharge. (MB20)*

*Oh, told me to drink [tea] stonebreaker and to wash with chamomile and now with this other [penile prosthesis] to do the exercise [vaginal dilation]. (MB30)*

## DISCUSSION

Cervical cancer is considered rare in women up to 30 years of age and its incidence increases progressively in the age group of 45 to 50 years. It is preventable cancer in developed countries, but its incidence and mortality remain high, especially in regions with lower socioeconomic status<sup>(2,11)</sup>.

The incidence of endometrial cancer has increased by more than 50% in the past two decades, and one of the strongly related factors is age: 75% of diagnoses or more occur in women over 50, and the mean age is 63 years<sup>(2,12)</sup>.

In this study, all included participants were diagnosed with cervical or endometrial cancer. Although the sample is not probabilistic, this finding reaffirms that these neoplasms are the most common among genital cancers.

The age of the participants was similar to that of other studies and, although the investigation does not include family income, considering the low educational level found, the relationship with the low socioeconomic standard is inferred. This contributes to less access to health and cases of advanced diseases, such as the staging found and the number of cases of cervical cancer, a disease, as already stated, preventable or that can be treated without the need for brachytherapy, when diagnosed early

A study found the predominance of cervical cancer cases in women with none to three years of schooling (84.17%), while in women with more than eight years of schooling there was a low incidence (14.83%), and concluded that, among the sociodemographic aspects, education is shown as the variable with the greatest influence on the risk of developing the disease and recommends health education to reduce incidence rates<sup>(13)</sup>.

It was observed that the lack of knowledge and misinformation about the treatment, evidenced in the participants' speeches, were factors that generate fear and insecurity, harmful to the psychological health of women, and that, added to the low level of education, may have contributed negatively to coping with treatment care and co-responsibility with health and autonomy in decision making.

A study points out that women in brachytherapy, due to the lack of knowledge and misconceptions about treatment, are anxious, recognizing that the information does not relieve all patients' fears, but contributes to coping with the treatment. Through professional information, the patient deals better with the new life condition<sup>(14)</sup>.

Nursing consultation, in this context, is seen as an essential tool to meet the needs of health education, thus contributing to the expansion of the potential to cope with the disease and treatment, based on the changes of mindset and habits<sup>(15)</sup>. Given the findings,

the need to expand the scope of health education in the study scenario is emphasized, as a strategy to reduce the lack of knowledge and control psychological changes.

Chatting in the waiting room, in other non-institutional settings and content found on the internet have generated ambiguous meanings. Anxiety-generating information was observed, but also the participants' support speech encouraging the confrontation by other women who were starting therapy, the encouragement strongly linked to hope in the face of religious/faith beliefs. The participants' advice represented an implicit way of making evident something remarkable about their trajectory. Wishing strength, they recalled their efforts to overcome the treatment. Affirming that "everything will work out", they brought up what they were attached to, the hope of a cure, that there would be no damage to health and the absence of pain during the procedure.

Therefore, the relevance of professional assistance in waiting rooms is identified, or at least, the investigation during health consultations, of the conversations that took place in this place, as a strategy to reinforce or clarify established concepts.

A study that developed actions in the waiting room in the oncology subject, shows that the activity enables the development of autonomy, the exchange of knowledge, affections and bonding between users. It allows health professionals, together with users, to produce new representations regarding health, illness and ways of care, working as a welcoming and critical-reflective space<sup>(16)</sup>.

Concerning religiosity and/or spirituality, the influence on the coping process was observed. Thus, it is understood that health care must value this aspect. A study discusses that when diagnosed with cancer, religion seems to protect against the development of anxiety, because it increases hope. Thus, it suggests that interventions include the assessment and consideration of religious resources in the clinical practice of the multi-professional team<sup>(17)</sup>.

Regarding the attention received from professionals, infrastructure and organization of available services, the speeches showed appreciation for the team and the ambiance, showing confidence in the technical support received, as well as the welcoming and humanized care. It is noteworthy that the study scenario has a multidisciplinary team recognized for its comprehensive and humanized care for patients undergoing treatment.

Because of the lack of information about treatment and its complications, the need to review professional approaches is evident, especially because it involves the woman's right to brachytherapy.

The results found instigate the thinking by nurses and the health team for the comprehensiveness of the information linked to the treatment process. It is considered relevant that all information about treatment, its complications, benefits and related care during and after treatment are discussed with women from the beginning, using attentive listening and the necessary therapeutic communication. Reorientations may require priority and/or complements in all nursing consultations.

In the oncological context, there are many difficult communications<sup>(18)</sup>. Addressing the risk and prevention of vaginal stenosis configures difficult communication. However, its evaluation, classification and prevention are determinants for a better quality of life for women in and after brachytherapy<sup>(19)</sup>.

As for the nursing care provided by the professionals, the participants highlighted the use of "stonebreaker" tea to stimulate diuresis, the use of chamomile tea for vaginal irrigation and the vaginal dilation exercise. In this context, it was observed that many recommended care was not mentioned by women, which suggests the non-assimilation of content or insufficient health education.

Women undergoing brachytherapy should be instructed on the anatomical female gynecological characteristics, on brachytherapy and its immediate and late side effects and



related care, which include the disuse of vaginal creams; the need to communicate to the health team about vaginal bleeding during and after brachytherapy; waxing of pubic hair; eight hours fasting before anesthetic sedation procedure; water intake of 2.5 to 3 liters of liquid per day; adoption of healthy eating; reporting to the team if changes in intestinal elimination; skin care of the perianal region; reporting of anxiety, fears, insecurities; use of vaginal douche with chamomile tea once a day; vaginal dilation exercise with the use of penile prosthesis, on average, 2 to 3 times a week, for about ten minutes, starting after finishing treatment; return to sexual activity about a month after the end of brachytherapy, after inflammatory symptoms is reduced; use of vaginal lubricant during sexual intercourse and/or vaginal dilatation exercise with penile prosthesis, indefinitely or as recommended by the physiotherapist; scheduling follow-up appointments with radiotherapists, oncologists, gynecologists and physiotherapists<sup>(20-21)</sup>.

Summarizing the three-dimensional exploration (time, social and place dimension) in the narratives<sup>(9)</sup>, it was identified that reports heard in the waiting room negatively influence the meaning of brachytherapy, generating fear and anxiety. The future is linked to the belief of a cure, to faith and post-brachytherapy care, highlighting the care for the prevention of vaginal stenosis, "accepted with restriction". And yet, in this dimension, the influence of the information deficits of the professionals and the low education level were found causing misinformation about the treatment and care.

Because of the social dimension, the meaning was influenced by the attention of the multidisciplinary team and the welcoming, mitigating the meanings of the temporal dimension. The meaning given to the place dimension was associated with the quality of the infrastructure and organization of the service offered.

As a limit of the study, the inclusion of women with cervical and endometrial cancer is pointed out, excluding the other topographies of genital cancers. A more comprehensive study should be carried out.

## CONCLUSION

The meaning of brachytherapy is strongly influenced by the time dimension (present time) by other people's reports, in general, reports that generate fear and anxiety. The meaning for the future tends to be linked to the hope of healing, faith and post-brachytherapy care. In these, the prevention of vaginal stenosis and the influence of misinformation stand out, caused by the deficits of information of the professionals and the low education of the participants. In the social dimension, the meaning is influenced by professional care and welcome given. In the place dimension, the meaning is linked to the quality of the infrastructure and organization of the service.

The relevance of health education is highlighted to minimize the physical and emotional effects resulting from brachytherapy and positively impact women's narratives.

It is understood that the findings may contribute to the review of cancer and nursing care in the study setting, highlighting the need for comprehensive information on treatment and side effects before the start of brachytherapy.

## ACKNOWLEDGMENTS

To the Institutional Scientific and Technological Initiation Program - PIICT PIBIC/CNPq Scholarships - PIBIC-Af/CNPq - BIPI/UFSC 2017/2018 - PROPESQ 01/2017 Notice, for the granting of a PIBIC scholarship that allowed the development of this study.

## REFERENCES

1. Ferlay J, Colombet M, Soerjomataram I, Mathers C, Parkin DM, Piñeros M, et al. Estimating the global cancer incidence and mortality in 2018: GLOBOCAN sources and methods. *Int J Cancer Onco.* [Internet]. 2019 [accessed 16 jun 2019]; 144(8). Available from: <https://doi.org/10.1002/ijc.31937>.
2. Funston G, O'Flynn H, Ryan NAJ, Hamilton W, Crosbie EJ. Recognizing gynecological cancer in primary care: risk factors, red flags, and referrals. *Adv Ther.* [Internet]. 2018 [accessed 16 jun 2019]; 35(4). Available from: <http://doi.org/10.1007/s12325-018-0683-3>.
3. Instituto Nacional de Câncer José Alencar Gomes da Silva - INCA. Coordenação de Prevenção e Vigilância. Estimativa 2018: incidência de câncer no Brasil. Rio de Janeiro: INCA, 2017.
4. Iżycki D, Woźniak K, Iżycka N. Consequences of gynecological cancer in patients and their partners from the sexual and psychological perspective. *Menopause Rev* [Internet]. 2016 [accessed 16 jun 2019]; 15(2). Available from: <https://doi.org/10.5114/pm.2016.61194>.
5. Minig L, Padilla-Iserte P, Zorrero C. The relevance of gynecologic oncologists to provide high-quality of care to women with gynecological cancer. *Frente Oncol.* [Internet]. 2016 [accessed 16 jun 2019]; 5:308. Available from: <https://doi.org/10.3389/fonc.2015.00308>.
6. Banerjee R, Kamrava M. Brachytherapy in the treatment of cervical cancer: a review. *Int J Womens Health* [Internet]. 2014 [accessed 16 jun 2019]; 6. Available from: <https://doi.org/10.2147/IJWH.S46247>.
7. Silva AAL da, Rosa LM da, Schoeller SD, Radünz V, Martins MM, Fernandes HIVM, et al. Perfil sociodemográfico e clínico de mulheres com câncer no trato genital submetidas à radioterapia. *Cogitare enferm.* [Internet]. 2019 [accessed 16 jun 2019]; 24. Available from: <http://dx.doi.org/10.5380/ce.v24i0.58467>.
8. Pellizzon ACA. Pain relief procedures before high-dose-rate brachytherapy for non-surgical treatment of cervix cancer. *J Contemp Brachytherapy* [Internet]. 2018 [accessed 16 jun 2019]; 10(6). Available from: <https://doi.org/10.5114/jcb.2018.81027>.
9. Clandinin DJ. *Engaging in Narrative Inquiry.* WalnutCreek, CA: Left Coast Press, Inc.; 2013.
10. Bardin Laurence. *Análise de Conteúdo.* São Paulo: Edições 70; 2016.
11. Speck NM de G, Pinheiro J da S, Pereira ER, Rodrigues D, Focchi GR de A, Ribalta JCL. Cervical cancer screening in young and elderly women of the Xingu Indigenous Park: evaluation of the recommended screening age group in Brazil. *Einstein (São Paulo)* [Internet]. 2015 [accessed 17 jun 2019]; 13(1). Available from: <http://dx.doi.org/10.1590/S1679-45082015AO3222>.
12. Braun MM, Overbeek-Wager EA, Grumbo RJ. Diagnosis and management of Endometrial Cancer. *Am Fam Physician* [Internet]. 2016 [accessed 16 jun 2019]; 93(6). Available from: <https://www.aafp.org/aafp/2016/0315/p468.html>.
13. Cavalcante A, Simão G, Camargo I, Faria L, Moreira M, Álvares W. Relação da escolaridade com o número de mortes por câncer de colo uterino. *Rev. Educ. Saúde* [Internet]. 2014 [accessed 16 jun 2019]; 2(1). Available from: <http://periodicos.unievangelica.edu.br/index.php/educacaoemsaude/article/view/924>.
14. Ehlers A, Makanjee CR. Exploration of gynaecological cancer high dose-rate brachytherapy treatment: a pilot study. *Pan Afr Med J.* [Internet]. 2018 [accessed 16 jun 2019]; 30:27. Available from: <https://www.dx.doi.org/10.11604/pamj.2018.30.27.14608>.
15. Soares MLCA, Trezza MCSF, Oliveira SMB de, Melo GC de, Lima KR da S, Leite JL. O custo da cura: vivências de conforto e desconforto de mulheres submetidas à braquiterapia. *Esc. Anna Nery.* [Internet]. 2016 [accessed 16 jun 2019]; 20(2) Available from: <http://dx.doi.org/10.5935/1414-8145.20160043>.

16. Becker APS, Rocha NL da. Ações de promoção de saúde em sala de espera: contribuições da Psicologia. *Mental* [Internet]. 2017 [accessed 16 jun 2019]; 11(21). Available from: [http://pepsic.bvsalud.org/scielo.php?script=sci\\_arttext&pid=S1679-44272017000200004&lng=pt&tlng=pt](http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1679-44272017000200004&lng=pt&tlng=pt).
17. Zarzycka B, Sliwak J, Krok D, Cizek P. Religious comfort and anxiety in women with cancer: The mediating role of hope and moderating role of religious struggle. *Psychooncology* [Internet]. 2019 [accessed 16 jun 2019]; 28(9). Available from: <https://doi.org/10.1002/pon.5155>.
18. Silva LP de S da, Santos I dos, Castro SZM de. Comunicação de notícias difíceis no contexto do cuidado em oncologia: revisão integrativa de literatura. *Rev. enferm. UERJ* [Internet]. 2016 [accessed 16 jun 2019]; 24(3):e19940. Available from: <http://dx.doi.org/10.12957/reuerj.2016.19940>.
19. Silva RDN da, Rosa LM da, Radünz Vera, Cesconetto D. Evaluation and classification of vaginal stenosis in brachytherapy: instrument content validation for nurses. *Texto contexto - enferm.* [Internet]. 2018 [accessed 16 nov 2019]; 27(2). Available from: <http://dx.doi.org/10.1590/0104-070720180005700016>.
20. Pessi MR, Feurchutte KK, Rosa LM da, Hammerschmidt KS de A, Radünz V, Alverez AM. Prevenção da estenose vaginal pós-braquiterapia: Intervenção de enfermagem. *Rev. enferm. UFPE online* [Internet]. 2016 [accessed 16 jun 2019]; 10(9). Available from: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/11433>.
21. Ottawa Hospital. A guide to your HDR brachytherapy for cancer of the cervix. Ottawa: Ottawa Hospital; 2016 [accessed 16 out 2018]. Available from: <https://www.ottawahospital.on.ca/en/documents/2017/01/cp85b-hdr-brachy-therapy-of-cervix-english-april-2016.pdf/>.

Received: 12/08/2019

Finalized: 23/04/2020

Associate editor: Luciana Puchalski Kalinke

Corresponding author:

Luciana Martins da Rosa

Universidade Federal de Santa Catarina

R. Eng. Agrônomo Andrei Cristian Ferreira, s/n - 88040-900 – Florianópolis, SC, Brasil

E-mail: [luciana.m.rosa@ufsc.br](mailto:luciana.m.rosa@ufsc.br)

Role of Authors:

Final approval of the version to be published - VR, MD, RHS, FL, MRP

Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - EBD, LMR



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).