



WOMEN WITH GYNECOLOGICAL CANCER: MEANING OF BRACHYTHERAPY¹

Luciana Martins da Rosa*

Érica Bernardes Duarte**

Maria Eduarda Hames***

Vera Radünz****

Mirella Dias*****

Camila Beltrame Bagio*****

Maria Angélica Arzuaga*****

ABSTRACT

Objective: to know the meaning of brachytherapy in women with gynecological cancer. **Methods:** qualitative, descriptive and exploratory research conducted with 32 women who underwent brachytherapy at an oncology institution in Santa Catarina, Brazil. Data collection took place between September 2017 and July 2018 through semi-structured interviews. Communications were submitted to content analysis, including enumeration rules for the analysis of sociodemographic and clinical data and for the quantification of grouped reports. Publications related to the theme and the Comfort Theory theoretically supported the inference of the data. Five thematic categories emerged; in this article three are presented. **Results:** the category "Fear and personal beliefs in coping with gynecological cancer and brachytherapy" highlights the fear of death, the desire for healing and attachment to family and religiosity; "Fear of treatment and related discomforts" depicts changes related to physical, psychological and environmental contexts; "Pain as meaning" reveals the painful perception felt by women as a result of illness or brachytherapy. **Conclusion:** knowing the meaning of brachytherapy allows nurses to rethink data collection and nursing planning for better health education and reduction of discomfort.

Keywords: Brachytherapy. Nursing. Female Genital Neoplasms. Pain.

INTRODUCTION

Gynecological cancers occur throughout the topography of the cervical and uterine body, uterus, ovaries, fallopian tubes, vagina, and vulva and are among the most frequent of all malignant neoplasias in the female population. The highest incidences are related to cervical cancer. In Brazil, estimates for 2020 include 16,590 new cases of cervical cancer and 6,540 cases of cancer of the uterine body⁽¹⁾.

In 2018 the incidence of gynecological cancers in Brazil affected 11,237 women. Risk factors for these neoplasms are diverse, but advanced age, recurrent infections, indiscriminate use of hormones/hormone and family gynecological history stand out^(1,2).

Therapies used to treat gynecological cancers vary according to the characteristics of each neoplasm, however, the most common procedures

are surgery, chemotherapy, hormone therapy and radiotherapy, the latter modality includes brachytherapy and teletherapy. These therapies can be performed alone or in combination^(3,4).

Brachytherapy, the focus of this study, is a type of radiotherapy that uses ionizing radiation inserted in close contact with the tumor volume; in this case, the radioisotope Ir-192 is used, being planned with 2D orthogonal radiographs, in order to minimize radiation adjacent organs, such as the bladder and rectum. Its planning is carried out with the support of the oncologist, radiotherapist and medical physicist, and is widely used to control the most advanced gynecological cancers^(3,5,6).

Despite technological advances in the context of brachytherapy, immediate or late side effects persist and may alter the quality of life of women undergoing therapy. Immediate side effects include gastrointestinal and urinary changes, changes in the

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*Nurse. Federal University of Santa Catarina (UFSC). Florianópolis, Santa Catarina, Brazil. E-mail: luciana.m.rosa@ufsc.br ORCID iD: <https://orcid.org/0000-0002-1884-5330>.

**Nurse. Florianópolis City Hall. Florianópolis, Santa Catarina, Brazil. E-mail: erica.bernardes@gmail.com ORCID iD: <https://orcid.org/0000-0003-0707-1330>.

***Student of the Undergraduate Nursing Course. UFSC. Florianópolis, Santa Catarina, Brazil. E-mail: dudahames@gmail.com ORCID iD: <https://orcid.org/0000-0001-9584-5388>.

****Nurse. UFSC/Florianópolis, Santa Catarina, Brazil. E-mail: vera.radunz@ufsc.br ORCID iD: <https://orcid.org/0000-0002-9262-8457>.

*****Physical therapist. Oncology Research Center. University of Santa Catarina. Florianópolis, SC, Brazil. E-mail: mirelladiaz.fisio@gmail.com ORCID iD: <https://orcid.org/0000-0002-2109-3563>.

*****Nurse. Palhoça Municipal Polyclinic. UFSC/Florianópolis, Santa Catarina, Brazil. E-mail: camila.bagio@unisul.br ORCID iD: <https://orcid.org/0000-0002-3887-6994>.

*****Nurse. Faculty of Nursing at the Antioquia University. Medellín, Colombia. E-mail: maria.arzuaga@udea.edu.com ORCID iD: <https://orcid.org/0000-0002-1306-2556>.

skin and vaginal mucosa and reduced blood cells. Late side effects encompass vaginal stenosis, vaginal dryness, dyspareunia and bone changes, lymphedema of the lower limbs, early menopause, urinary and intestinal changes⁽⁶⁻⁹⁾.

The physical symptoms caused by gynecological cancers, the side effects of brachytherapy, the form of administration of ionizing radiation and the little or total ignorance about the therapy can cause fear, uncertainty, shame, changes in body image and low self-esteem, directly and negatively impacting the quality of life of women in the social, family and marital spheres. In addition, exposure of intimate regions of the body and uncomfortable positioning during radiation are cited as factors that generate physical and emotional discomfort for women⁽⁷⁾.

Another study states that fear and concern about the disease modify the daily lives of these women. Uncertainty regarding the future is a constant feeling among them. The disease and the treatment affect each woman differently, and thus the authors recommend that nurses learn to know how this happens in the individuality of each one of them, to then help them to experience the disease and the treatment. They also recommend that investigations should be expanded in other health care services for women with gynecological cancer⁽¹⁰⁾.

The above initial contextualization justifies the development of this study and raises the following question: what is the meaning of brachytherapy for women with gynecological cancer treated at an oncology institution in Santa Catarina? Thus, the objective of this investigation was to know the meaning of brachytherapy in women with gynecological cancer.

METHOD

This is a qualitative, descriptive and exploratory study carried out at the Radiotherapy Outpatient Clinic of the Oncological Research Center (CEPON), located in Santa Catarina/Brazil, which provides care for about 200 women in pelvic brachytherapy every year.

This study included women with gynecological cancers, submitted to brachytherapy, hysterectomized, who performed the procedure without analgesia or sedation, and non-hysterectomized women, who performed the procedure under anesthetic induction. The participant's disability or communication difficulties were the exclusion criteria; however, all patients

were eligible.

Data collection occurred between September 2017 and July 2018 and was carried out by a nurse/professor researcher and scientific initiation scholarship holder. The total number of participants, 32 women, was established by data saturation, that is, the lack of new elements in the groupings of information obtained by the sum of the communications submitted to the content analysis, which proved the repetition of the communications⁽¹¹⁾.

The selection of participants was carried out sequentially and for convenience, according to the dates of discharge from the pelvic brachytherapy articulated with the availability of time and place for interviews.

For data collection, semi-structured interviews were used, recorded and later transcribed, without validation of the transcriptions by the participants. The interview was conducted in the last brachytherapy session, in a place reserved to preserve the participant's privacy. The return of the participant to the study scenario after completion of treatment varied between 40 and 100 days, and many of them did not return to institutional care, as they continued to be followed in their macro-regions of the State, thus justifying the non-validation of the interview transcripts.

The closed questions investigated sociodemographic data (age, marital status, origin, education) and clinical data (type and stage of cancer and therapies used to control it). The guiding questions for the open questions were: "What did it mean for you to have to do brachytherapy?" "What feelings or discomfort arose during the treatment?"

The theoretical support for data analysis was based on results of other studies related to the subject in question, which address meanings and discomforts caused by brachytherapy^(7,10,12-19) and the Comfort Theory⁽²⁰⁾.

Meanings and discomforts include physical and emotional changes resulting from the disease and treatment and its side effects^(7,10,12-15,19), uncertainties in the future, affection relationships as a stimulus to cope with the disease^(7,10), religiosity and psychology as an emotional support^(16,17), and pain management⁽¹⁸⁾.

Discomfort in this study is understood as the absence of comfort, or impaired comfort in the light of this Comfort Theory⁽²⁰⁾, comfort being a human need and an immediate and holistic multidimensional experience strengthened by the

satisfaction of three types of comfort (relief, tranquility and transcendence) in the four contexts of experience (physical, psycho-spiritual, social and environmental). In this theory, comfort needs are the result of care situations that cause tension and can be physical, psycho-spiritual, social and environmental, pathophysiological, education and support and needs for financial advice and intervention.

A study states that research, definition of recommendations and consensus are essential for better care for women in brachytherapy, considering the lack of standardized health concepts and strategies in the national and international context in this care area⁽²¹⁾.

The legal precepts for research with human beings were followed, including registration of ethical appraisal, under opinions 1,948,795 (proponent) and 2014,249 (co-participant). To preserve the anonymity of the participants, the alphanumeric coding MB1-MB32 was adopted.

For content analysis, after transcription of the communications, an exhaustive reading of the narratives was carried out, coding of the registration units, selection of the context units, grouping of the registration units by similarity, with definition of the thematic categories. Characterization data of the participants were submitted to the enumeration rules (frequency measures), according to the content analysis technique⁽¹¹⁾.

From the analysis of the reports obtained, five thematic categories emerged: Ignorance about Brachytherapy; Professional team attendance; Fear and personal beliefs in coping with gynecological cancer and brachytherapy; Fear of treatment and related discomforts and; Pain as meaning. Considering the volume of information, it was decided to present in this article the last three categories presented here and their thematic subcategories.

RESULTS AND DISCUSSION

Sociodemographic and clinical characteristics

The study included 32 women with gynecological cancer; the majority was diagnosed with cervical cancer, 26 (81.2%); with staging II, 11 (34.3%); were submitted to brachytherapy under anesthetic induction, 20 (62.5%); were treated with the association of teletherapy, brachytherapy and chemotherapy, 19 (59.3%). The participants' ages ranged between 25 and 77 years (average 51 years);

the majority were married or in a stable relationship, 23 (71.8 %); had complete/incomplete elementary school I, 16 (50%); and came from GrandeFlorianópolis, ten (31.2 %).

Ages of women were similar to those in other studies; the majority is close to 50 years old. Low level of education and higher incidence on cervical topography, among the different types of gynecological cancers, were also similar⁽²²⁻²⁴⁾.

In view of the low level of education, which still plagues the national situation, health education is a strategy to reduce the consequences of this social condition on women's health, contributing significantly to the early diagnosis of malignant lesions on the cervix, among others, and or precursors of these lesions, both curable if detected and treated early.

As for the ages of women, it is noteworthy that five (15.62%) were aged under 40 years. This condition can have implications for family planning, since most brachytherapy leads women to the impossibility of pregnancy, due to the action of radiation on the ovaries and the uterus itself. In this perspective, the importance of preventive exams is highlighted, which allow early diagnosis and treatment of cancer without the need for more complex therapies, such as brachytherapy.

The thematic categories and subcategories resulting from the analysis of communications on the meaning of brachytherapy in the perception of women themselves are presented sequentially.

Fear of dying and personal beliefs in coping with gynecological cancer and brachytherapy

This category is subdivided into three subcategories: Religiosity; Treatment as a cure; Motivations for treatment and fear of dying.

The "Religiosity" subcategory presents the accounts of ten interviewees who reveal hold on to God and prayer under the belief of its health benefits.

We don't know if there will be a cure or not, right? It is something that we have to have faith. Faith in God and the doctors that you will heal, right? (MB07).

[...] I pray, I ask God to help me [...] (MB13).

The subcategory "Treatment as a cure" refers to the speeches of 21 women who saw brachytherapy as a possibility of controlling the

disease.

It is a tiring treatment because I come from afar, but the feeling I have is that I will heal, I will be cured, that afterwards I will come back here just to do the monitoring, with physiotherapy, if I have to come back, just to visit. I will be cured (MB12).

I thought like this... about healing. It was the only word that came to mind. No matter how it will be, where it will be, the important thing is that [...] brachytherapy came to me as my cure, the end of a battle (MB15).

The subcategory "Motivations for treatment and the fear of dying" points out the concern with family members as a stimulus for coping with therapy and the disease. In addition, it reveals the fear of dying linked to the diagnosis.

I have two children at home and I think about being cured for them ... Because it is difficult for us to discover that we have this disease. When I am here I know what I am doing for them, whether in pain, without pain, it is for them, to continue with them. But it is very difficult to receive such a diagnosis. [...] One is 17, another is 6 [commenting on the age of the children]. I am mother, so I think about them. (MB12)

Nobody wants to die, because in the first moment that cancer comes, you think about death ... and then you want to live for your children [...] I think that's it, my motivation is my life, my family, huh?. Now my 23 year old son is going to give me a grandchild, he warned this week that his girlfriend is pregnant. So, like this, we want to fight to live for them and my family. (MB20)

Reports in this thematic category revealed that the meaning of brachytherapy is linked to religiosity and/or spirituality, used as a comfort strategy to reduce psychological discomforts, such as anxieties and fears linked to the disease. In addition, faith is understood as an aid to healing, added to concerns about the family that constitute a personal stimulus for maintaining life and coping with diagnosis and treatment.

These findings are similar to other studies that affirm the concern of women with the possibility of premature death and the consequences of this for their children⁽¹⁰⁾. In this context, they turn to a higher being, crying out for help to overcome their problems. Studies still claim that psychological discomforts must be quickly identified and specific interventions implemented, in order to allow for the relief of

discomfort. The desire to heal and continue living add to religious beliefs, giving strength to face the therapy^(19,20) and, health education must be adopted by nurses as a strategy to alleviate these women's concerns, uncertainties and anxieties⁽¹⁷⁾.

Given the results of this thematic category, the psychological discomfort felt by women is evident, as the reports clearly portray that the woman does not feel calm and transcendent. To hold to religiosity is the search for the desired relief and comfort that is related to maintaining life and solving problems.

In this group of findings in the light of the Comfort Theory, the psycho-spiritual context that encompasses the internal awareness of oneself and the meaning of life in the meaning of brachytherapy is evident. Also added to the socio-cultural context, which concerns interpersonal, family and social relationships, with emphasis on family relationships⁽²⁰⁾. In this sense, is evident the relevance of the institution of a well-planned and conducted nursing data collection, based on attentive listening, with due decision-making for better oncological nursing care to women with gynecological cancer submitted to brachytherapy.

Fear of treatment and related discomforts

This category groups subcategories entitled: Fear of treatment and; Treatment-related physical and emotional discomfort.

Reports in the subcategory "Fear of treatment" show the ignorance of the procedure and the technological apparatus as a source of emotional discomfort. Emotional discomfort is linked to shame by the exposure of one's own body to the medical professional (male); the feeling of loneliness and helplessness when women are alone in the brachytherapy room, in addition to the sadness of feeling the mutilated body.

Look, for me the good thing is if we were anesthetized from beginning to end. It is not that it hurts, but it is that we are afraid when we take out the irons. That thing that scares me. [...] It seems that it will hurt you all, when you see the doctor entering, you are traumatized, [...], it gives me fear, really fear (MB01).

After I learned what it was, I was very scared, very scared, really panic. I even had to go to the

psychologist (MB09).

Since the time I got there, I'm ashamed, especially of the doctors... not with them [speaking of nurses and nursing technicians] I feel good. It is when I see the doctors that I feel ashamed... We are women, right? Then, when they go to get the deal after the anesthesia, I close my eyes (MB14).

I feel a little ashamed, because whether or not it is an intimate part of powder medications afterwards [...]. And sadness for being mutilated, because whether we wanted to or not, something came out of us (MB28).

The subcategory "Physical discomfort related to treatment" brings together reports on the side effects of brachytherapy, the physical discomfort caused by positioning on the gynecological table, the long period of immobility, as well as the prolonged fasting.

What has caused me discomfort is that I lost a little bit of sensitivity, like, you always have to use an absorbent, because urine is leaking and I don't know how it is leaking, where it is leaking, everything is kind of new to me, I have whenever you look after me, then it's uncomfortable. [...] sometimes, I have to run to the bathroom (MB06).

On the first day I bled a lot. I did it on Thursday and I was bleeding on Thursday, Friday, Saturday and Sunday. I changed direct absorbent as if it were menstruation. And when I arrived, the second time I came for [brachytherapy], the doctor said it wasn't supposed to be bleeding like that, it was supposed to be just a little blood, it was even for me to come here [study scenario] (MB01).

Staying in that position is horrible, in addition to shame, it tires a lot. (MB22).

Brachytherapy is characterized by a procedure, in general, unknown to most people. This lack of knowledge alone brings uncertainty. The brachytherapy room is also characterized by an unfriendly environment, a closed environment, with the necessary equipment, nothing humanized, as it prioritizes biosafety and treatment effectiveness. The positioning of the body for brachytherapy is perceived as unpleasant and uncomfortable. The instruments introduced into the vaginal canal are bulky and their introduction into the vaginal canal frightens women. This condition impairs comfort and causes psychological and physical discomfort. Humanized care, health education and anesthetic

induction until the end of the removal of instruments can contribute to reduce these perceptions and resulting meanings.

To reduce discomfort related to the environmental context, attention is recommended to the interior design of the brachytherapy room, to the colors of the walls, which may contain pleasant/tranquilizing illustrations or stimulating phrases, as well as the use of music therapy.

For health education, it is recommended to conduct friendly and educational nursing consultations, activities in the waiting room and the provision of educational materials. In addition, support from psychology is recommended⁽¹⁷⁾ for the management of suffering.

As for the side effects resulting from brachytherapy, reported by the participants, they replicate the scientific evidence. A study indicates that 21.2% of women in pelvic brachytherapy have toxicities in the gastrointestinal tract (17.3%) and genitourinary (10%)^(12,13). Another highlights the presence of bleeding from the tumor or related lesion⁽¹⁴⁾.

The disease, the immediate and late side effects of treatment cause physical, psychosocial and functional changes. In this context, health care can allow these changes and even the feeling of mutilation to be minimized by adopting individualized actions⁽¹⁵⁾.

Pain as the meaning of brachytherapy

This category includes the pain reports verbalized by the participants. The meaning of pain runs through the idea of giving up treatment, the need to endure pain for better disease control. Among women who performed the procedure without anesthetic induction and/or analgesia, one reported no pain, three reported pain prior to the start of treatment and related to the disease, another seven reported pain after the end of each brachytherapy session. Among those who perform the treatment under anesthetic induction and analgesia until the end of the application of ionizing radiation, one reported pain prior to treatment, 11 pain when removing the instruments, and nine reported pain after the end of the brachytherapy session.

It's very horrible ... it's horrible to do that, right? The first time I went to do it I even thought about

giving up because it is very painful, I know a lot of people, I thought about giving up because it hurts a lot. (MB04).

The first [brachytherapy session] hurt more, the second already hurt less, except that the feeling of pain continued a lot ... except that I said: "No, I can take it! I am not that weak". (MB26).

I always think about how it will be, if I am going to feel pain again, if I am not going to feel, always that surprise of how it will be. (MB28).

Pain complaints show the urgency and importance of standardized pain assessment and management in women undergoing brachytherapy. Widespread measures are available for the assessment and control of different types of pain, and can be applied in the care of women in pelvic brachytherapy.

A study argues that there is a lack of data and prospective randomized clinical studies to assess the painful perception and discomfort experienced by women and recommends the need for further studies to expand scientific knowledge⁽¹⁸⁾.

Reports also show that the waiting period between the end of the administration of ionizing radiation until the arrival of the doctor to remove the instruments, despite being a short period, for women it is a long period, potentiating negative feelings.

We stay, I think about 15 minutes awake inside, right? With the door closed, sometimes I pray, I ask God to help me [...]. (MB13).

Thus, it is pointed out that this fact should be considered a contributing factor to the intensification of painful perception and discomfort in brachytherapy. In this sense, it is again pointed out that the importance of maintaining anesthetic induction until the end of the removal of instruments as a drug strategy. For women who perform the procedure without anesthetic induction, it is considered that the adoption of analgesia or even anesthetic induction¹⁸ could be assessed by the health team. In addition to the need for pain control for those women who already have pain, even before the procedure.

In addition, it is evident that all women, whether hysterectomized or not, should have the company of nursing professionals after the end of ionizing radiation until the removal of instruments. It is understood that such conduct

may allow for pain assessment, pain management and emotional support. Thus, it is reinforced that the pain felt by women composes the meaning of the therapy in the perception of women added to the other findings already revealed.

The pain or discomfort experienced by women during brachytherapy is the result of a combination of causes. The cervix and uterus are insensitive to heat stimuli or fine touch, but cervical dilation and uterine distension cause pain. The isthmus and myometrium have a large number of nerve endings⁽¹⁸⁾.

Given the above, the importance of consultations as a strategy for health education is highlighted, reducing ignorance and related discomforts and the importance of applying instruments for pain assessment and defining strategies for better pain control, before and after each brachytherapy session.

Under the view of the Theory of Comfort, observing the different compromises of comfort revealed in this study, the need for nurses to pay attention to reducing the discomfort identified in the meaning of brachytherapy is pointed out, contributing to the relief, tranquility and transcendence of women with gynecological cancer. Emphasizing that relief consists in satisfying a person's need; tranquility consists of a state of calm or satisfaction and; transcendence configures the state in which the patient feels that he has the capacity to solve his own problems, through a detachment from the concern with all discomforts. Such a state can only be achieved with the help of nurses, who must carry out their practice by adopting a set of comforting actions covering all the needs of the human being, in this context, the woman with gynecological cancer in brachytherapy⁽²⁰⁾.

CONCLUSION

The significance of brachytherapy found in the reports of women with gynecological cancer reveals the hold to religiosity and to the family, stimulating treatment and coping with the disease. It also permeates the fear of death and the procedure. The revealed meaning still depicts some discomforts, such as the shame of exposing the body during treatment, the sensation of mutilation, the uncomfortable positioning during the preparation and

application of ionizing radiation and the side effects related to the treatment and pain related to the disease and/or brachytherapy.

In this context, it is recommended that nurses

are attentive to listen and that appropriate decision-making is taken for better oncological nursing care for women in pelvic brachytherapy.

MULHERES COM CÂNCER GINECOLÓGICO: SIGNIFICADO DA BRAQUITERAPIA

RESUMO

Objetivo: conhecer o significado da braquiterapia em mulheres com câncer ginecológico. **Métodos:** pesquisa qualitativa, descritiva e exploratória realizada com 32 mulheres, submetidas à braquiterapia em instituição oncológica de Santa Catarina, Brasil. Na coleta de dados, entre setembro de 2017 e julho de 2018, aplicou-se entrevista semiestruturada. As comunicações foram submetidas à análise de conteúdo, incluindo regras de enumeração para análise dos dados sociodemográfico, clínicos e para quantificação dos relatos agrupados. Publicações relacionadas com o tema e a Teoria do Conforto sustentaram teoricamente a inferência dos dados. Emergiram cinco categorias temáticas, neste artigo apresentam-se três. **Resultados:** a categoria “O medo e as crenças pessoais no enfrentamento do câncer ginecológico e da braquiterapia” destaca o medo da morte, o desejo pela cura e o apego à família e à religiosidade; “Medo do tratamento e desconfortos relacionados” retrata as alterações relacionadas aos contextos físico, psicológico e ambiental; “Dor como significado” revela a percepção dolorosa sentida pelas mulheres em decorrência da doença ou da braquiterapia. **Conclusão:** conhecer o significado da braquiterapia permite que os enfermeiros possam repensar a coleta de dados e o planejamento de enfermagem para melhor educação em saúde e redução dos desconfortos.

Palavras-chave: Braquiterapia. Enfermagem. Neoplasias dos Genitais Femininos. Dor.

MUJERES CON CÁNCER GINECOLÓGICO: SIGNIFICADO DE LA BRAQUITERAPIA

RESUMEN

Objetivo: conocer el significado de la braquiterapia en mujeres con cáncer ginecológico. **Métodos:** investigación cualitativa, descriptiva y exploratoria realizada con 32 mujeres, sometidas a la braquiterapia en institución oncológica de Santa Catarina, Brasil. En la recolección de datos, entre septiembre de 2017 y julio de 2018, se aplicó entrevista semiestruturada. Los relatos fueron sometidos al análisis de contenido, incluyendo reglas de enumeración para análisis de los datos sociodemográfico, clínicos y para cuantificación de los relatos agrupados. Publicaciones relacionadas con el tema y la Teoría del Conforto basaron teóricamente la inferencia de los datos. Surgieron cinco categorías temáticas, en este artículo se presentan tres. **Resultados:** la categoría “El miedo y las creencias personales en el enfrentamiento del cáncer ginecológico y de la braquiterapia” destaca el temor a la muerte, el deseo por la cura y el apego a la familia y a la religiosidad; “Miedo al tratamiento y las molestias relacionadas” retrata las alteraciones relacionadas a los contextos físico, psicológico y ambiental; “Dolor como significado” revela la percepción dolorosa sentida por las mujeres debido a la enfermedad o la braquiterapia. **Conclusión:** conocer el significado de la braquiterapia permite que los enfermeros puedan repensar la recolección de datos y la planificación de enfermería para una mejor educación en salud y reducción de las molestias.

Palabras clave: Braquiterapia. Enfermería. Neoplasias de los Genitales Femeninos. Dolor.

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Corresponding author: Luciana Martins da Rosa. Avenida Mauro Ramos, 1250, A2, apt. 31, CEP: 88020-301. Florianópolis, Santa Catarina, Brasil. Telefone: (48) 3307-2726. E-mail: luciana.m.rosa@ufsc.br

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