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# BODY IMAGE PERCEPTIONS OF WOMEN WITH BREAST CANCER UNDERGOING ANTINEOPLASTIC CHEMOTHERAPY

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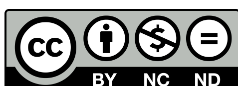


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**Abstract**: **Introduction:** Research shows a significant increase in the number of cancers in the world, about 18 million new cases, 2.1 million of which are breast cancer (MATTIAS et al., 2018). The illness of the physical body, especially the breast, causes negative feelings and thoughts in women, which permeate the fear of death, treatment, and reach a place connected to being a woman, which alters their femininity, self-image and self-esteem (PISONI et al., 2013). Chemotherapy is identified as the main cause of suffering due to its side effects, mainly alopecia. (OTANI; BARROS; MARIN, 2015). Young women are the ones who suffer the most, as they generally value their image and femininity more and have expectations about their fertility (GOMES; SILVA 2013). **Methods:** research anchored in the Convergent Care Research (PCA) with a qualitative approach (TRENTINI, PAIM; SILVA, 2014), carried out at the chemotherapy outpatient clinic in a Hospital in Paraná, with the participation of 16 women. A semi-structured interview was used to collect information, between January and March 2020. The data were coded and processed by the free software IRAMUTEC, which generated *corpus* text through descendent hierarchical classification (CHD) (CAMARGO; JUSTO, 2016). **Results**: six classes of words and a cloud of words were generated, from which the categories emerged: self-image impaired by hair loss and impact of negative self-esteem on quality of life. **Conclusion:** Of the effects caused by chemotherapy, alopecia is the greatest cause of suffering among women. This knowledge subsidizes the nurse in the development of individualized care, with acceptance and humanization.
**Keywords:** Breast cancer; combined antineoplastic chemotherapy protocols; body image; alopecia; Coping strategies.

## INTRODUCTION

Breast cancer has become a health problem of great magnitude due to the increase in cases worldwide, demanding efforts from different sectors to prevent and/or treat in advance, with actions that promote better prognoses, increased survival and quality of life for women [1].

The illness of the breast brings with it a series of implications for those who receive the diagnosis, causing negative feelings and thoughts in the woman, which permeate the fear of death, fear of treatment, and reach a place connected to being a woman, which alters her femininity, self-image and self-esteem[2]. For the woman [3], the breast represents much more than just a part of your body, being linked to female empowerment, sensuality, sexuality, as well as a source of love, especially during breastfeeding.

Of the anguish experienced by women in coping with breast cancer, mastectomy and chemotherapy are identified as the major causes of suffering. The latter in particular due to the series of symptoms that it triggers during its application, with hair loss being identified as the most feared symptomatology[3].

Treatment with chemotherapy is aggressive, has systemic action, that is, it affects not only the cancer cells, but also the normal ones, which generates a series of side effects such as alopecia that impacts the perception of self-esteem and self-image. Other symptoms are perceived as muscle pain, fatigue, nausea, vomiting, loss of functional condition, mucositis, disturbances in emotional function, insomnia, anxiety, weakness and dyspnea[4]. Young women tend to perceive the effects of chemotherapy on their bodies more negatively, as they generally value their image more, femininity and have expectations about their fertility[5].

The most feared side effect among women is alopecia, as it triggers different meanings,

with body image distortion, which causes a decrease in self-esteem, generates suffering, affects interpersonal relationships and social life[6]. Authors point out the need for women with breast cancer to receive support for coping with the disease, with the support of family and friends being important[7].

From this reflection, the problem arose: which aspects of a woman's life are affected by the diagnosis of breast cancer and the completion of chemotherapy? Thus, the data presented in this manuscript are the result of the patients' reflections on their perceptions regarding chemotherapy and their self-image.

This study aims to fill the knowledge gap about breast cancer and chemotherapy in the view of women who face this process, making it possible to provide a more humanized and individualized nursing care, respecting the different areas of care. Nursing care is inserted in a complex of actions that involve negative symbologies and stigmas of a disease that requires more intensive care, with long-term treatment [8].

## OBJECTIVE

To know the perceptions about the body image of women with breast cancer undergoing chemotherapy.

## METHODS

### ETHICAL ASPECTS

The study is the result of a research project submitted to the ethics committee of a Teaching Hospital in Paraná, and only after approval did data collection begin. The research complied with the norms suggested by Resolution 466/2012, with data collection carried out after the participants signed the Free and Informed Consent Form (TCLE). They were assured of anonymity and that they could withdraw from participating in the research at any time.

### THEORETICAL-METHODOLOGICAL FRAMEWORK

To support this study, research was carried out in the LILACS, BDENF, Medline, PubMed, Scielo, Uptodate databases, in the Virtual Health Library (VHL), protocols/ manuals of the Ministry of Health, in addition to books that address topics related to the study, in the period between July 2018 and March 2020. For this, descriptors found and selected through the Health Sciences Descriptors (DeCS) were used, defining the following terms: breast cancer; combined antineoplastic chemotherapy protocols; body image; alopecia; Coping strategies. The languages used were: Portuguese, English and Spanish.

### STUDY TYPE

This is a qualitative study anchored in the methodological framework of the Convergent Care Research (PCA) [9]. To guide the methodology, the Equator-network SRQR instrument was used, which defines quality criteria for qualitative research.

PCA is characterized by improvements with the introduction of innovations in the context of nursing and health care practice[10]. This type of research is based on the property of articulation with health care practice.

The qualitative methodology allows the researcher to insert himself in the daily life of the participants and thus understand how knowledge is created. Giving meaning to data is the action of qualitative research[11].

### METHODOLOGICAL PROCEDURES

The study followed the stages outlined by the Convergent Care Research (PCA): design, instrumentation, scrutiny, analysis and interpretation[9].

In the conception phase, the problem was defined, based on the perception of the woman's coping during chemotherapy. The

scrutiny deals with the definition of the place of study, which is carried out in the outpatient service of hematology and oncology of a Teaching Hospital in Paraná. The service is provided free of charge, with 100% financing by the Unified Health System (SUS). In the scrutiny phase, strategies for obtaining information were defined, including interviews, participant observation and other ways that contemplate listening to the other with sensitivity and creativity, in accordance with the ethics of care and human life.

## STUDY SCENARIO

The research site was the hematology and oncology outpatient clinic in a teaching hospital in Paraná.

## DATA SOURCE

Data were collected through semi-structured interviews with women with breast cancer, selected by intentional choice, according to the inclusion criteria: outpatient chemotherapy treatment from January to March 2020, aged over 18 years and literate. Women with mental illness were excluded from the study.

## COLLECTION AND ORGANIZATION

The interviews took place after the explanation of the research object and the women's consent to be part of the research, being recorded electronically (cell phone), saved in a digital file and transcribed in full in Word software. To ensure anonymity, each participant was identified by letters and numbers. To preserve the identity of the women who participated in the study, tabulation and processing codes were created for the information collected in the interviews, with M being related to the term woman, followed by numbers from 1 to 16, according to the date the interview was carried out (M1, M2, M3...).

## WORK STEPS

The research was carried out in the following steps:

Recruitment of participants: through wide dissemination in the unit, with information in the doctors' offices and the nursing station, respecting the women's scheduling for consultations and/or chemotherapy. The approach was made in the waiting room and/or in the chemotherapy room, the women who agreed to participate were sent to a private place. About 25 women were approached, of which five did not accept to participate because they were completing the treatment and four because they did not understand the object of the study, thus selecting 16 participants.

Data collection: the interviews were recorded and archived digitally (cell phone), with the authorization of the participants. Subsequently, the speeches were transcribed in their entirety.

## DATA ANALYSIS

Data analysis was carried out according to John Creswell's framework, which comprises the steps: data organization and preparation; data reading; codification; generation of themes or categories; description; and interpretation of data [9].

For data processing and coding, the program Interface de R pour les Analyzes Multidimensionnelles de Textes et de Questionnaires® (IRAMUTEQ) was used, which applies statistical analyzes to qualitative textual data. Textual data analysis is verified by frequency or word association, which captures the structure and organization of the data, indicating the relationships between the most frequent words, which helps in the management of qualitative data [12].

The textual analysis carried out by the IRAMUTEC software generated a dendrogram with six categories of word classes, interconnected, according to the

frequency of the words: class 1: Perceptions related to the discovery of breast cancer; classes 2 and 3: Negative perceptions of self-image related to chemotherapy; classes 4 and 5: Coping with breast cancer and treatment with chemotherapy; and class 6: Self-care related to the decrease in side effects. A word cloud was generated for each class, which groups the words and organizes them graphically according to their frequency. They are presented with different sizes: the largest words are those with the highest frequency (or another chosen indicator) in the corpus, and the smallest have lower frequencies. The first ones are placed in the center of the chart. It's a very simple lexical analysis. However, it is graphically interesting, as it provides an initial idea of the content of the textual material [12]. The word cloud generated by classes 2 and 3 was the basis for the discussion of this study.

## RESULTS

Following the steps of the PCA, data collection was performed using semi-structured interviews, containing questions about the perception of women related to the treatment of women with chemotherapy and knowledge about the disease. Sixteen women diagnosed with breast cancer, undergoing treatment with chemotherapy, participated in the study.

The average age of the participants was 46 years old, most are married and have children. Regarding the level of education, most have completed high school. With regard to the stage of the disease, most are with breast tumor staging in III or IV, of which four have metastases in other organs and five are on a palliative therapeutic regimen. Longer treatment time was found in patients with metastasis and palliative chemotherapy.

The analysis of the interviews carried out by the IRAMUTEC software resulted in the word cloud, which was discussed based on the scientific literature. Data processing showed that the most cited word was **hair**, representing 56% of the text segments generated by the program.

Figure 1 represents the speeches of the participants through the cloud of words generated by IRAMUTEC, depending on their frequency:

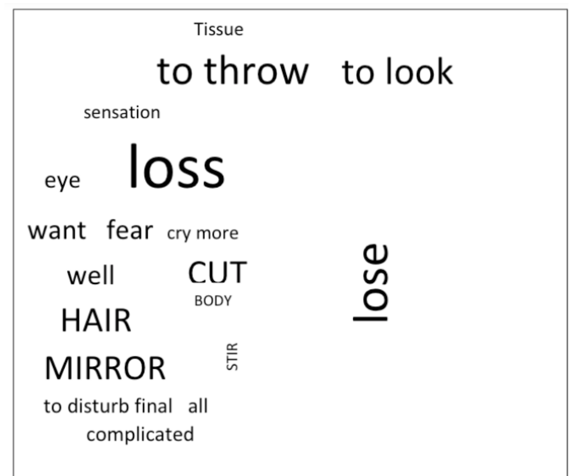


Figure 1 – Graphic representation as a function of word frequency, Curitiba-PR, Brazil, 2020.

The most frequent words in the interviewees' speeches were: hair, loss, cut, fall, lose and mirror.

## DISCUSSION

The discussion is permeated by the responses of the 16 participants, related to their perception of their self-image.

### PROFILE OF PARTICIPANTS

The age of the interviewees ranged between 30 and 59 years old, of which seven were between 40 and 49 years old, six between 50 and 59 years old, three between 30 and 39 years old and none was younger than 30 years old. The aging process of women is one of the risk factors for breast cancer, with a higher incidence between the ages of 40 and

69 years [1].

Regarding the marital status of the interviewees, it was identified that 13 are married or have a stable relationship, two are single and one is a widow. An interesting aspect verified when analyzing the profile of the participants was in relation to the number of children, because although in the literature nulliparous women have a higher risk of developing breast cancer, in this study the majority are multiparous[1].

With regard to the level of education, 11 have secondary education, three have completed higher education and two have elementary education. The profession of the participants varied according to the level of education, women with elementary education work as housewives, cooks and cleaning assistants, while the majority with secondary and higher education work in trade.

Authors [6] state that better survival in women with breast cancer is directly related to higher socioeconomic status and higher education, due to faster search for health services, which contributes to early diagnosis and a positive prognosis.

## CATEGORIES: IMPACT OF HAIR LOSS ON BODY IMAGE AND COPING STRATEGIES FOR THE DISEASE

Impact of hair loss on body image

Researches[13] point out that receiving the diagnosis of breast cancer is marked by phases of emotional instability for the woman, as it affects several domains of her life. An important trigger for suffering is the body change caused by undergoing chemotherapy treatment, having an impact on their self-image and self-esteem.

Women's self-esteem is affected throughout the process of coping with breast cancer, chemotherapy affects self-image, sexuality and their quality of life[14]. The following narratives demonstrate negative feelings related to the change in body image:

> *When I look in the mirror and see that I don't have hair, I get sad and cry. (M14)*
>
> *The worst was hair loss and the fear of people seeing me. (M10)*
>
> *Losing my hair was pretty sad. (M14)*
>
> *Suddenly you see yourself like this without a strand of hair and it's not just hair, it's eyebrows, eyelashes, you're left with nothing. (M5)*

The speeches above demonstrate that hair loss is the main cause of suffering for women. Similar results were found by other authors [6] in Minas Gerais, when interviewing 13 women, with the aim of finding out how they received the diagnosis, with alopecia pointed out by the participants as the side effect that causes the most fear not only of hair loss, but also of the eyebrow, axillary, pubic, legs and arms. This study shows that the concern with alopecia is related to the idea of femininity linked to hair, in which women are expected to have long hair. Studies[13] share that chemotherapy destroys female vanity due to hair loss.

It is a phase in which the woman does not recognize herself, her perception of herself is modified and generates suffering, as can be seen in the following statement:

> *It was that loss of identity, because in the church I follow, hair is a matter of identity. (M6)*

A study [15] of a cohort with 64 women assisted at an oncology hospital, showed that oncology treatment interferes with women's autonomy and independence, causes loss of identity, fears, anguish, affecting emotional and quality of life.

The impact of bodily changes caused by breast cancer was also perceived in a cross-sectional study [16] with 157 women in southern

Brazil. The results showed that married women have greater negative perceptions than single, widowed or separated women. This is because femininity affected by the changes undergone interferes with the relationship and sexuality of the couple, in addition to the partner starting to play the role of caregiver.

Another factor that contributes to the decrease in self-esteem and loss of body image is the prejudice experienced by the participants, as reported below:

> *People stare, they don't sit in the same pew in church, they get scared. (M8)*

> *People look scared, as if we were going to pass something on to them. (M5)*

The narratives demonstrate that social relationships are affected by breast cancer. In line with the statements, a survey[17] points out that women feel stigmatized and discriminated against in society, favoring a decrease in self-esteem. "Body image goes beyond visual sensoriality and encompasses affective, social and physiological experiences that influence the way women perceive themselves" [18].

Researches [19] demonstrated that discrimination is the result of a retrograde thinking that associated the pathology with mystical conditions, being punishment for committed sins, or precarious health conditions and lack of hygiene. Although society has undergone changes and evolved over the years, this situation demonstrates that there is still a lot of misinformation, and the wide dissemination of knowledge is important.

In order to understand the multiple phases of women during treatment, especially with regard to emotional and psychological aspects, nursing is perceived as a team of professionals who use technical competence and scientific knowledge to provide care. The nurse is appointed as the professional who practices empathy with the patient and family undergoing cancer treatment [20].

Disease coping strategies

When women are diagnosed with breast cancer, they experience negative feelings such as despair, fear, deep sadness and crying. These feelings often arise to the detriment of the idea of death that the disease brings, as can be seen in the following speeches:

> *I was sad to think that death might come. (M3)*

> *The first thing that comes to mind, I think, for everyone who is diagnosed with cancer is death. (M5)*

> *I was afraid of dying. (M8)*

> *I was floored at the moment, I didn't imagine it could be that. (M13)*

> *There are days I wake up and I don't want to wake up so I don't remember. (M10)*

> *I thought, now I'm going to die. (M7)*

The speeches above are in line with the results found by other authors [13] who report that the feeling of death, fear, sadness, denial of the disease are the most present feelings when discovering breast cancer and starting treatment. It is common to develop anxiety, shame, insomnia and feelings of worthlessness and personal devaluation[14].

Denial is experienced as a strategy to distance oneself from this difficult and frightening reality due to all the adversities caused by the disease, in addition to the idea that it is a deadly disease, aspects such as femininity and sexuality are also affected[15].

Studies [16] pointed out that the feeling of death, fear, sadness, denial of the disease are the most present feelings in the discovery of breast cancer and initiation of treatment. Corroborating this thought, authors [21] bring that the news of the malignant tumor causes afflictions in women, with the presence of frustrations, conflicts, fears and insecurity,


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due to the thought of possible death and the association of the incurable nature of the disease. Patients report sadness and emotional distress:

> *At the beginning I was calm, but I started to shake myself at the end because I was already tired, I couldn't do anything right. (M8)*

> *The person is shaken at first, but then they have to accept it. (M14)*

> *At first he is shaken, but he knows that the treatments will work. Treatment with technology is all advanced. (M15)*

> *It was very sad, we are shaken. Now I've accepted it, and sometimes I even forget that I have it. (M14)*

The speeches above demonstrate that despite the sadness, the participants seek ways to strengthen themselves and face the process in the best way. Similarly, a search[22] expose that from the first manifestation of the body that something is wrong until the search for health services and diagnosis, the woman is exposed to different feelings. The authors argue that at the same time the fear and anguish of what might be happening, the woman is endowed with hope and positive thoughts that the results will not indicate anything serious. Thus, when cancer is confirmed, a mix of negative feelings is perceived, such as sadness, frustration, difficulty in accepting and perceiving oneself as having the tumor.

Authors of an integrative review [23] concluded that the strategy for coping with cancer treatment used by most people is religiosity, spirituality and family support. The practice of faith makes the disease no longer the focus and the patient starts to channel his thoughts to something positive, thus maintaining balance, which is a source of energy to continue in the struggle for life. This was the same result found in search[15] which points to religiosity and spirituality as the main strategies for coping with breast cancer. The following statements confirm the findings of that study:

> *The word is faith, there is no other word, it is faith. (M12)*

> *A lot of people think that's how death is, but no, I see it as a rebirth, that this will help me to be reborn. (M4)*

> *I accepted it very well, the first thing for you to be cured of any disease is to accept what you have. (M12)*

Family support and acceptance by close people are also reported as great motivators for participants to face this phase:

> *Certain things I thought back there are of no importance to me, I just want my family close to me. (M4)*

> *Everything will be fine, I have a lot of people with me, praying, cheering. The family that needs us, so you have to get attached to God and follow. (M5)*

> *I didn't stop with my activities, the person has to be strong, he has to seek help of all kinds. (M14)*

The narratives demonstrate the importance of family support during treatment. an integrative review [24] raised that when a person gets sick, the whole family is affected, the pain and the challenges to overcome the illness are experienced by everyone. The authors state that this family communion is the base of support for the woman with breast cancer to face the treatment with positivity and courage. Study [25] agrees with this thought by ensuring that the family assumes the role of caregiver of the person with a serious illness, experiencing the same pain and anxieties, and the support directed at the time of diagnosis represents security and strength to face the disease.

On the other hand, authors [26] point out that family members suffer from fear of losing a loved one, low self-esteem, revolt, change in routine and reversal of roles, impotence in the

face of illness, difficulty in expressing feelings. Despite these negative feelings, there was commitment, mutual support and a search for alternatives to adapt to the new reality.

A research[27] pointed out that health professionals play an important role in coping with women with breast cancer, being appointed as support during treatment by providing their care in a humane way, in addition to being responsible for passing on important information. This can be seen in the following statement:

> *Below God there are doctors, there are you (nurses) who are very affectionate and provide very good care. (M16)*

When realizing she has a breast tumor, the woman recreates meanings of herself, seeking to perceive herself in this context, to create coping strategies:

> *Who would have thought that one day I would be here undergoing chemotherapy, which is a new world that I never thought of getting close to and today I live in it. (M1)*

> *We don't need a diagnosis of breast cancer for us to die, we die of anything else. Take care of it like you're taking care of the flu. (M3)*

The statements above demonstrate the new self-perception experienced by the study participants, and it is in line with the findings of other researchers[6] that bring reports of women who denote awareness of the severity of the disease, however there is also the perception that they must face their condition, tracing the cure as a goal. As already discussed in class 1, faith and positive thinking fuel the strength to face the therapeutic process:

> *I feel very anxious before I come to do the chemotherapy, after I do I think it's for the best. (M11)*

> *I only try to absorb good things, I don't have to listen to negative things, we can't get discouraged. (M4)*

> *It's hard not easy. I'm living one day at a time. I think it's just any disease and let's move on. (M2)*

> *First, the person must become aware of it and accept it because there is no other way. (M3)*

The speeches reveal resilience to accept the current health condition and follow the treatment. This was pointed out by authors[28] with canadian women. It was evident that acceptance, resilience and positivity based on religiosity provided better adaptation to the disease and better quality of life. Similar results were found in a study[29] which aimed to evaluate the influence of optimism on the quality of life of 100 cancer patients. The survey revealed that more optimistic patients have better quality of life, demonstrating more active coping with the problem. These patients had lower rates of sadness and depression than those who were less optimistic, which was also reflected in the reduction of symptoms.

It was observed in these classes the search for motivations for coping with the disease and oncological treatment, with family, faith, religiosity and positive thinking as the main fuels of strength.

## STUDY LIMITATIONS

The limitations of this study were due to the COVID-19 pandemic, which limited the number of participants and prevented workshops for discussion.

## CONTRIBUTIONS TO THE NURSING AREA

Caring for patients with cancer, especially breast cancer, requires nurses to have communication skills that establish bonds and trust between the parties. Understanding the various complexities that involve the discovery of breast cancer directs a dialogue based on respect and empathy, strengthening comprehensive care for women and providing

acceptance.

## FINAL CONSIDERATIONS

This study had its objective achieved through the methodological trajectory based on the Convergent Care Research, with its use it was possible to point out perceptions related to the self-image of women with breast cancer. And this way, allow the development of tools that contribute to the care practice in health services, which provide improvement and qualification of nursing care.

The sociodemographic characteristics of the participants show that most are aged between 40 and 49 years old, are married and have children, which is consistent with results from other studies.

The reports of the women who participated in the research confirm what is found in studies already published on the subject, the discovery of breast cancer is permeated with negative feelings, such as sadness, depression, fear, anguish, despair, crying and disbelief. The avalanche of information permeates feelings ranging from denial to acceptance and the search for alternatives to face the disease and treatment.

The diagnosis of breast cancer carries a very strong stigma of death, making it scary and desperate to find out that you are in this health condition. Gradually these negative feelings are replaced by positive thoughts and healing becomes the main focus of these women.

Chemotherapy was identified as the main stressor and trigger of negative perceptions, especially with regard to self-image and self-esteem, as it causes side effects that make cancer visible. Hair loss was perceived as the main source of suffering for women, since it is the moment when the disease manifests itself and makes it possible for other people to identify their condition.

In addition to personal issues, women need to deal with prejudice and merciless looks in society, which makes social interaction difficult and favors introspection and isolation.

Thus, it is expected that this study can contribute to the improvement of nursing care, allowing nurses to develop a look beyond the biological, understanding multidimensional aspects that involve care in oncology, strengthening the bond between professionals and patients.

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