



## Coping strategies after breast cancer diagnosis

### *Estratégias de enfrentamento após o diagnóstico de câncer de mama*

### *Estrategias de afrontamiento tras el diagnóstico de cáncer de mama*

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#### ABSTRACT

**Objective:** To describe coping and supporting strategies for women after breast cancer diagnosis. **Methods:** This qualitative descriptive study was conducted from March to April 2019 in the city of Pau dos Ferros, Rio Grande do Norte, Brazil, with seven women served by the Cancer Patients Support Center. Data were collected using semi-structured interviews and submitted to content analysis, which yielded the following thematic categories: Diagnosis - Death sentence or possibility of cure; Repercussions in daily life - Main changes and their aspects in the face of illness; The importance of relationships in coping with breast cancer - family, friends and spouse; Cancer Patients Support Center – Health education and promotion. **Results:** Faced with the diagnosis, women looked out for overcoming measures in their spouses, families, friends and even religion/spirituality. They changed their eating habits and took a leave from work. **Conclusion:** This study allowed to understand the difficulties women face after breast cancer diagnosis. These difficulties include emotional, social and family problems. We also found that this type of neoplasm causes both positive and negative changes in their lifestyle.

**Descriptors:** Breast Neoplasms; Emotional Adjustment; Health Promotion.

#### RESUMO

**Objetivo:** Descrever as estratégias de enfrentamento e de apoio às mulheres ocorridas após o diagnóstico de câncer de mama. **Métodos:** Trata-se de uma pesquisa descritiva e qualitativa, realizada de março a abril de 2019, na cidade de Pau dos Ferros, Rio Grande do Norte, Brasil, desenvolvida com sete mulheres vinculadas ao Núcleo de Apoio aos Portadores de Câncer. A coleta de dados foi realizada mediante entrevista semiestruturada, analisada através da análise de conteúdo, surgindo as categorias temáticas: Diagnóstico - Sentença de morte ou possibilidade de cura; Repercussões na vida cotidiana - principais mudanças e os seus aspectos diante do adocencimento; A importância das relações para o enfrentamento do câncer de mama - família, amigos e cônjuge; Núcleo de apoio aos portadores de câncer - Educação e promoção em saúde. **Resultados:** Diante do diagnóstico, as mulheres buscaram no cônjuge, na família, nos amigos e na religião/espiritualidade medidas de superação. Ocorreram mudanças de hábitos alimentares e a necessidade de afastamento do trabalho. **Conclusão:** O estudo permitiu conhecer as dificuldades ocorridas na vida de mulheres com o diagnóstico de câncer de mama, as quais são de ordem emocional, social e familiar. Evidenciou-se, ainda, que esta neoplasia promove mudanças no estilo de vida, negativas ou positivas.

**Descritores:** Neoplasias da Mama; Ajustamento Emocional; Promoção da Saúde.

#### RESUMEN

**Objetivo:** Describir las estrategias de afrontamiento y de apoyo a las mujeres tras el diagnóstico de cáncer de mama. **Métodos:** Se trata de una investigación descriptiva y cualitativa realizada entre marzo y abril de 2019 en la ciudad de Pau dos Ferros, Rio Grande do Norte, Brasil, desarrollada con siete mujeres del Núcleo de Apoyo a los Portadores de Câncer. La recogida de datos



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se dio a través de entrevista semiestructurada que ha sido analizada por el análisis de contenido de la cual se ha presentado las categorías temáticas a continuación: *Diagnóstico - Sentencia de muerte o posibilidad de cura; Repercusiones de la vida cotidiana - principales cambios y sus aspectos ante la enfermedad; La importancia de las relaciones para el afrontamiento del cáncer de mama - la familia, los amigos y el cónyuge; Núcleo de apoyo a los portadores de cáncer - Educación y promoción de la salud.* **Resultados:** *Ante el diagnóstico las mujeres buscaron los cónyuges, la familia, los amigos y la religión/espiritualidad como medidas de superación. Ocurrieron cambios de hábitos alimentarios y la necesidad de alejamiento del trabajo.* **Conclusión:** *El estudio ha permitido el conocimiento de las dificultades emocionales, sociales y familiares de la vida de mujeres con el diagnóstico de cáncer de mama. Se ha evidenciado, aún, que esta neoplasia genera cambios negativos o positivos en el estilo de vida.*

**Descriptor:** *Neoplasias de la Mama; Ajuste Emocional; Promoción de la Salud.*

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## INTRODUCTION

Estimates from the National Cancer Institute for the 2018/2019 biennium revealed the recording of 600 thousand cases of cancer per year, with 59,700 them referring to cases of breast cancer<sup>(1)</sup>. The breast cancer mortality rate adjusted by the world population shows an upward curve and represents the leading cause of cancer death in the Brazilian female population, with 13.22 deaths/100,000 women in 2017<sup>(2)</sup>.

The launch of the National Plan to Strengthen the Cancer Prevention, Diagnosis and Treatment Network in 2011 reaffirmed and expanded the actions of the National Breast Cancer Control Program with the purpose of reducing exposure to risk factors and mortality and improving the quality of life of women with this type of cancer<sup>(2)</sup>.

This neoplasm develops due to several factors - biological and environmental - with emphasis on those related to age and endocrine and genetic aspects. Other factors include exposure to ionizing radiation under the age of 40, regular drinking, obesity and physical inactivity<sup>(3)</sup>.

Thus, in recent years, Brazil's National Health Promotion Policy (*Política Nacional de Promoção da Saúde - PNPS*) has enhanced its performance with a view to promoting quality of life and expanding opportunities for healthy practices in order to minimize factors that predispose individuals to the onset of cancer<sup>(4)</sup>.

Breast cancer is one of the great challenges to public health policies as it affects a large portion of the Brazilian population, thus requiring the development of programs and actions for the promotion of health and the prevention, treatment and control of the disease, as well as a network of adequate and integrated services with competent professionals who can work in different regions of the country<sup>(3)</sup>.

The relevance of the present study lies in conducting more in-depth research on the topic and in dealing with a major public health problem. Investigating the theme will help understand the profile of the interviewees, their feelings, and the impact of the disease on their lives. Bringing the reality of those who experience this neoplasm to light is important for planning effective actions based on data present in the social reality itself and highlighting the importance of discussing a theme that sometimes goes unnoticed.

Thus, this study was conducted based on the following research questions: What are the breast cancer coping strategies used by women? What is the existing support network for these women and what influence does it have on the treatment and/or cure process? To answer these questions, we conducted a study aimed at describing coping and supporting strategies for women after breast cancer diagnosis.

## METHODS

This qualitative descriptive study<sup>(5)</sup> was conducted in the city of Pau dos Ferros, Rio Grande do Norte, Brazil, a municipality located in the Mesoregion of Alto Oeste Potiguar. The municipality had an estimated population of 30,934 inhabitants in 2019. In the last census, conducted in 2010, there were 27,745 inhabitants: 25,551 lived in urban areas and 2,194 lived in rural areas, with 13,516 men and 14,229 women. In functional terms, Pau dos Ferros polarizes the region with demands for educational and health services for the Alto Oeste Potiguar region<sup>(6)</sup>.

The study participants were women enrolled in the Cancer Patients Support Center. Until the development of this study there were 80 participants enrolled who participated in group activities and meetings. For a better analysis of this sample, inclusion criteria were defined as follows: women with current and/or past diagnosis of breast cancer in the last five years (from 2014 to 2019) who actively participated in the Cancer Patients Support Center in the city of Pau do Ferros/Rio Grande do Norte, Brazil. Women who had some cognitive or mental impairment that could

hinder interviews or who did not systematically participated in the support group and/or those who had died in the past five years were not included.

Data collection took place from March to April 2019 through semi-structured interviews and focused on the objective of the study and other issues inherent to the momentary circumstances of the interview<sup>(7)</sup>. The instrument included information related to characterization data and open-ended questions related to the objective of the study. The interviews were previously scheduled and then held individually in a private place at the participants' homes. They lasted an average of 15 minutes and were recorded and later transcribed for a better understanding of the statements.

Sampling was terminated when saturation was reached<sup>(8)</sup>, that is, when the data began to repeat, which occurred after seven women were interviewed and no new information emerged during the semi-structured interviews.

The data were submitted to content analysis<sup>(9)</sup>, which consists of several techniques that attempt to describe the content emitted in the communication process through speeches or texts. It consists of three phases: pre-analysis, data exploration, and interpretation. Pre-analysis consists of the collection of the material and its analysis by the researcher. During the exploration of the material, a more in-depth analysis - compared with the pre-analysis - is carried out. Finally, the interpretation of the data consists of the organization of the transcribed interviews and the analysis of the participants' statements seeking to understand interviewees' point of view regarding the study<sup>(9)</sup>.

The participants' statements were initially transcribed verbatim. After reading and exploring all the material, we proceeded to sort the collected content by meaning similarities observing what was expressed in the statements to grasp the true meaning of the statements, thus carrying out what is called analysis categorization. The analysis of similarities yielded four categories: Diagnosis - Death sentence or possibility of cure; Repercussions in daily life - Main changes and their aspects in the face of illness; The importance of relationships in coping with breast cancer - family, friends and spouse; Cancer Patients Support Center - Health education and promotion.

The project was approved by the Research Ethics Committee (REC) of the Rio Grande do Norte State University (*Universidade Estadual do Rio Grande do Norte - UERN*), Approval No. 2.959.989, and complied with the norms recommended in Resolution No. 466 issued by the National Health Council on December 12, 2012. During the visit, the participants signed an informed consent form that guaranteed the rights of the participants. The women were identified in the study using the letter "W", referring to the word Woman, followed by a number assigned according to the order of the interviews.

## RESULTS AND DISCUSSION

This section will present and discuss the data on the identification of the interviewees, the categories that are described, and the discussion in the light of the literature on the theme.

The seven participants were between 35 and 64 years old and fitted in the age range that is at risk for the development of breast cancer. The occurrence of this disease is relatively rare before the age of 35, being more common in women over 50 years of age since the older the age the greater the chances of developing breast cancer<sup>(10)</sup>.

With regard to marital status, one participant was separated, another was widowed, two were married and three were divorced. Regarding motherhood, all the participants were mothers. Only one of the seven participants was still undergoing treatment. The other six were monitored for health maintenance due to the remission of the disease, with periodic visits to the doctor for six months to one year.

### Breast cancer diagnosis impact: death sentence or possibility of cure

This category allowed women to mention that the diagnosis of breast cancer was a difficult moment that gave rise to questions, as seen in the following statements:

*"When we get a diagnosis like that, we feel overwhelmed, and the first feeling that hit me was fear, fear of really dying... Dying and leaving my daughter, right?!" (W4)*

*"When I found out, I went to the doctor right away. Then he said: 'let's do an ultrasound', then I did it and he said that I should look for a mastologist right away because there was a dark spot and I knew that dark was not good, is it?! That was it, since that time my world fell apart." (W3)*

In this context, experiencing the incurability of a disease in oncology means that it spread from the place of origin and reached vital organs and tissues, and the patient then starts to see death as being increasingly closer<sup>(11)</sup>.

*“There is no way we can define testing positive for this disease... It was really desperate, I froze, I did not believe it in the beginning.” (W3)*

*“It is a very strong, very painful feeling.” (W7)*

The feelings that emerge after confirmation of a diagnosis are diverse and vary according to the individual interpretation of the social meaning attributed to the disease. They can change and acquire different meanings depending on the phase in which the woman experiences them<sup>(12)</sup>. Facing this moment as a natural process and being available to discuss death openly constitutes a possibility to transcend the existential perspective of life with the aim of understanding existence and, consequently, the meaning of dying<sup>(13)</sup>.

Thus, the participants of the present study sought ways of coping with the disease, such as religion and/or spirituality, as described below:

*“The doctor said: ‘so?’, Then I said: ‘it is in God’s hands’. I have always been a very strong person... It is about having faith in God.” (W1)*

*“[...] May God’s will be done.” (W2)*

*“[...] I put myself in God’s hands. I told Him to do everything I deserved in my life.” (W5)*

Religion and spirituality have been included in several positive aspects of the patient’s adequacy to the diagnosis and treatment of cancer. They have been shown to be relevant to health and the recovery of people with chronic diseases<sup>(14)</sup>.

While religion deals with a system of beliefs, practices and rituals specific to a group or individual, spirituality is one of the main functions of religion in the search for meaning for life/existence; however, it is not an essentially exclusive property of certain religious practices<sup>(15)</sup>.

Thus, in the present study, the statements related to the religiosity and spirituality of women with breast cancer seemed to support them and minimize their pain and loss or even shape the situation they faced.

### **Repercussions in daily life: main changes and their aspects in the face of illness**

This second category describes the repercussions in daily life and the main changes and their aspects in the face of illness. When asked about the changes that occurred after breast cancer diagnosis, the women mentioned the adoption of new lifestyle habits, such as new eating habits. This moment also presents itself in different ways, such as concern with prejudice, stigma, impact on self-image, fear of death, complications secondary to treatment and fear of recurrence<sup>(11)</sup>.

Regarding the change in diet, W4 and W7 said:

*“I changed my diet. We always try to follow the healthiest diet possible. [...] if I used to eat well before, nowadays I try to eat even healthier.” (W4)*

*“Look, I went through a totally radical change, starting with my diet [...]!” (W7)*

There are studies showing that one’s diet is considerably important in the onset, promotion and spread of cancer<sup>(16)</sup>. A varied and nutritionally balanced diet featuring a high intake of fruits and vegetables and with a prevalence of fresh foods constitutes a protective factor against such neoplasm<sup>(17)</sup>. After treatment, people who have been diagnosed with cancer, including those without the disease, should also follow these guidelines. Having good eating habits, doing physical activity and trying to keep an adequate weight is essential to recover health and prevent the return of the disease and also the development of another type of cancer<sup>(18)</sup>.

Another point addressed in relation to changes in lifestyle refers to the assistance that the cancer patient needs to perform certain tasks, as mentioned by W1:

*“I got really sick, I couldn’t even move. I stopped working, then I stopped. Now it’s all up to the hands of others.” (W1)*

Women still mention insecurity after treatment, which is related to the possible recurrence of the disease. This moment can be accompanied by a feeling of sadness and frustration with expectations of healing, vulnerability and lack of control over events<sup>(19,20)</sup>.

*“[...] It’s because you will never be that person again, you know? You become a totally insecure person. You get worried about each exam you have to do. Well, I am like that, I don’t know about other patients.” (W7)*

*“It changes everything. You are afraid of everything. It’s very difficult, you know?” (W6)*

*“I have been quite afraid of doing the tests and hearing that the disease has returned.” (W3)*

When treatment ends, the person who is ill and his/her family are normally affected by anxiety and are faced with a difficulty in making plans because they are afraid of getting the news of a recurrence with each new exam<sup>(21)</sup>.

Cancer affects the body causing it to lose functionality, color, beauty. It changes its standards and requires the patients to adapt to a new reality, which threatens the integrity of their life<sup>(22)</sup>. Lack of information and embarrassment of having a stigmatized disease led some of the study participants to get away from people in their social life for fear of rejection:

*“When the population sees that you have a problem like that, they reject it in a way, you know? I don’t know if it’s hair loss... I don’t know what they imagine. First, we feel like this, that people are looking at you and saying: ‘poor woman, she will die the day after tomorrow’, you know? And that is not true [...] but that is how the population treats you, with certain rejection. I don’t know if they are afraid of it being contagious [...]” (W4)*

*“[...] I was rejected by people in my family. Well, because these people who came to my house had never brought water for their children to drink before, you know? Then, during this period when I was undergoing chemotherapy, these people came and brought water, then you can see, you can feel that you were rejected, right?! But I never told anyone, I kept it for myself. I didn’t eat at anyone’s house, I didn’t drink water at anyone’s house. Not today. This has changed more today, but I still don’t like it. Well, I drink it if it’s in a disposable cup. Yes, then I don’t kiss anyone’s hand either. It became some sort of trauma, you know?” (W6)*

The health-disease process also suffers social, economic and cultural interference and is perceived by each one in different ways. The labeling of cancer as a fatal disease is directly linked to the idea of prolonged suffering and the proximity of death, thus resulting in prejudice against those affected and leading most of them to social isolation<sup>(23)</sup>.

With regard to professional life, some of the participants had to quit their jobs or household chores due to limitations, poor quality of life, medical intervention or other related factors. Work has significant importance in people’s lives. For women who carry out such activities inside or outside the home, the experience of working is transformed by cancer, which keeps them away from their routine activities:

*“I used to work, but I had to stop and I currently receive a financial aid.” (W3)*

*“I am a teacher, so at the time I had to stop teaching, but I was always going to visit my students because I missed their affection a lot.” (W4)*

*“I was already retired, so I only work at home. But today I do fewer things because the doctor told me to be careful. I can’t put on strength, lift weight now that I have had the surgery.” (W5)*

*“I used to work. I used to sew, then I stopped because I can’t punch myself, right?” (W6)*

In addition to fear and concern regarding the disease and cancer treatment, anxiety and fear can emerge in view of the possibility of job loss<sup>(24)</sup>.

### **The importance of relationships in coping with breast cancer: family, friends and spouse**

This category refers to the idea that the discovery of cancer does not happen without relationships to cope with it. Cancer triggers changes in the whole family context, particularly in the closest relatives and social support network, so that all members, to a greater or lesser extent, are affected by the situation<sup>(21)</sup>.

When asked about the support they got, the interviewees expressed the following statements:

*“I had a lot of support, thank God. They prayed in the church of Our Lady, they came to visit me, the people from the other church came. I had a lot of support, thank God.” (W1)*

*“Thank God, I had support. They always gave me a word of comfort, they helped me to pray and ask God for strength and for everything work out fine. Thank God, I was well supported, both by my friends and my family [...]” (W2)*

*“[...] even from those who were not so close. They offered help in various ways, from visits to financial aid [...]” (W3)*

*“I did have support, yes. From the closest ones, I did. My family, my boyfriend’s family and some really close friends.” (W4)*

*“A lot! They said: ‘no, you will win it all, because today there are millions and trillions who have this problem.’” (W7)*

It is through physical or emotional assistance that they feel more strengthened, whether this support comes from family or friends<sup>(13)</sup>, which contributes to make coping with the disease easier.

Regarding the children's reactions to the confirmation of the diagnosis, the responses refer to suffering and concern, as mentioned in the statements by W2 and W3:

*"[They] were very nervous. My daughters were afraid because I said that it is risky, that it can be genetic, can't it?! But then I said: 'Have faith in God and then nothing will go wrong.'" (W2)*

*"It was one of the most difficult times for me. I can tell you that perhaps more difficult than receiving the diagnosis was giving the news to my daughter. I started talking to her [...], then I talked about the result and said that the treatment was going to cause hair loss and such. Then, when I said that to her, she simply looked at me like that and said: 'mommy, so you mean you have cancer?', then she started crying, crying desperately [...]. Then I hugged her tight, she was crying, but I told her that I didn't want to see her crying." (W3)*

In addition to being surprised by the presence of a disease that has a great emotional impact, the family is often asked to cope with the changes caused by the disease<sup>(21)</sup>. It is in this sense that cancer can be considered a family disease given the impact it causes within this sphere of coexistence<sup>(25)</sup>, shaking the whole family dynamics.

The responses with regard to the marital relationship were different, as seen below:

*"My husband accepted it, thank God." (W2)*

*"My husband has become more distant." (W3)*

*"No, I think it made it stronger [...]. So, maybe we had our relationship weakened by any trivial situation, right? [...] So, I think that, faced with a situation like this, he proved that he really is on my side in good times and in difficult times." (W4)*

*"He changed for the better, because he is an alcoholic, but he quit drinking. Hail Mary, he is everything to me, he does everything for me, because I've seen many cases in which they don't even want to know more about their women when they discover the disease, right?!" (W6)*

The quality of affective relationships can have implications for mental, physical and social and professional life and is a predictor of longevity, general health conditions and illness processes<sup>(26)</sup>. The disease creates the opportunity to reevaluate feelings and attitudes within the relationship and thus the woman's recovery is conditioned to the way the partner accepts the situation.

### **Cancer Patients Support Center: health education and promotion.**

This category addresses the importance of a support network that can assist them from cancer diagnosis to the rehabilitation phase in view of the illness process and all its setbacks by promoting health education and promotion measures.

Regarding the relevance that the support center has in coping with breast cancer, the participants made the following statements:

*"The center is an extraordinary institution, you know? There, people often find everything they need in a way [...]. There we share stories, and not to mention that they are always concerned with welcoming, bringing in a social worker, a psychologist for you and your family if you need monitoring. So, I think they are wonderful, committed." (W3)*

*"They help a lot. There is a psychologist, a nutritionist... They always give us a lot of words of support, they always talk to us, they explain things right." (W2)*

*"There I had a lot of support. They gave me a lot of support. I always got some groceries (grocery shopping) when I was undergoing chemotherapy." (W5)*

*"It was very important, but I was afraid to participate because at the beginning I didn't accept that I was sick, but then I started attending it. They were always present, making visits and helping with food parcels." (W4)*

Multiprofessional practice is defined as a permanent education space that enables the updating of health promotion strategies that have a more comprehensive and effective scope<sup>(27)</sup>. In this perspective, it is possible to highlight the Cancer Patients Support Center as a network that enables them to live with people who experience similar feelings, such as fears and insecurities, among many others, during the stages of diagnosis and treatment of cancer.

The center is a support space to share stories between patients and different professionals that provides an exchange of experiences and measures for health education and promotion through actions targeted at its users. The idea of mutual support conforms here as the main relevant aspect in the process of facing difficulties<sup>(28)</sup>.

Bringing the reality of those who experience breast cancer to light may enable new health promotion actions and may contribute with new coping measures based on data obtained from the reality itself, thus allowing better diagnosis and treatment directions.

In addition, the disclosure of the support group's contributions may assist other women in adhering to treatment as they provide greater clarifications about the disease and promote health education actions that allow the adoption of healthier practices, which is in line with the principles of the National Health Promotion Policy (*Política Nacional de Promoção da Saúde - PNPS*)<sup>(4)</sup>, whose general objective is to promote equity and improve living conditions and hence expand the potential of individual and collective health and reduce vulnerabilities and health risks arising from social, economic, political, cultural and environmental determinants<sup>(4)</sup>.

This neoplasm promotes a series of lifestyle changes. Elements such as language, behaviors, beliefs and socioeconomic conditions have significant influences on how to deal with the experience of this disease<sup>(29)</sup>.

The present study also made it possible to identify the need for further studies in other fields of knowledge that can study cancer as a whole in its different settings. The results presented herein may also be useful to guide other health professionals, family members, and even other patients on how to seek cancer coping strategies in the face of biopsychosocial changes and think about strategies that may prevent it.

## FINAL CONSIDERATIONS

This study allowed to find out the major impacts on the lives of women living with breast cancer, which are of an emotional, social and family nature. The feelings experienced by women when receiving the diagnosis are diverse and show that despite all the scientific and cultural advances cancer is still represented as a disease directly related to death.

However, even with this idea in mind, women are able to stand up and face the disease in a more positive way and have religion and faith, social, marital and family support, and changes in habits for a healthier life as strategies for coping with the disease.

Thus, the Cancer Patients Support Center is characterized, in the lives of these women, as a support and care providing network and a place of education, cancer information and coping and support during treatment stages by promoting the exchange of knowledge and experiences, providing physical, social and psychological support, and positively influencing the breast cancer treatment and cure process.

## CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest.

## CONTRIBUTIONS

**Karline Kelly da Silva** and **Francisca Adriana Barreto** contributed to the study conception and design; acquisition, analysis and interpretation of data, and writing and/or revision of the manuscript. **Francisca Patrícia Barreto de Carvalho** and **Pablo Ramon da Silva Carvalho** contributed to the writing and/or revision of the manuscript.

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## REFERENCES

1. Instituto Nacional de Câncer. Estatísticas de câncer [Internet]. 2019 [accessed on 2019 Sep 8]. Available from: <https://www.inca.gov.br/numeros-de-cancer>
2. Instituto Nacional de Câncer. Detecção precoce do câncer de mama [Internet]. 2018 [accessed on 2019 Sep 8]. Available from: <https://www.inca.gov.br/controlado-cancer-de-mama/acoes-de-controlado/deteccao-precoce>

3. Ohi ICB, Ohi RIB, Chavaglia SRR, Goldman RE. Ações públicas para o controle do câncer de mama no Brasil: revisão integrativa. *Rev Bras Enferm.* 2016;793-803.
4. Ministério da Saúde (BR), Secretaria de Vigilância em Saúde, Secretaria de Atenção à Saúde. Política Nacional de Promoção da Saúde: PNPS: Anexo I da Portaria de Consolidação nº 2, de 28 de setembro de 2017 [Internet]. Brasília: Ministério da Saúde; 2018 [accessed on 2019 Sep 8]. Available from: [http://bvsms.saude.gov.br/bvs/publicacoes/politica\\_nacional\\_promocao\\_saude.pdf](http://bvsms.saude.gov.br/bvs/publicacoes/politica_nacional_promocao_saude.pdf)
5. Barbato S, Alves PP, Oliveira VM. Narrativas e dialogia em estudos qualitativos sobre a produção de si. *Rev Valore.* 2020;5(0):22-36.
6. Instituto Brasileiro de Geografia e Estatística. Censo Demográfico 2010 [Internet]. [2011] [accessed on 2019 Sep 8]. Available from: <https://cidades.ibge.gov.br>
7. Manzini EJ. Considerações sobre a elaboração de roteiro para entrevista semi-estruturada. In: Marquezine MC, Almeida MA, Omote S, organizadores. *Colóquios sobre pesquisa em Educação Especial*. Londrina: eduel, 2003. p. 11-25.
8. Rhiry-Cherques RH. Saturação em pesquisa qualitativa: estimativa empírica de dimensionamento. *Rev Bras Pesqui Market* [Internet]. 2009 [accessed on 2016 Oct 15];4(08):20-7. Available from: [http://www.revistapmkt.com.br/Portals/9/Edicoes/Revista\\_PMKT\\_003\\_02.pdf](http://www.revistapmkt.com.br/Portals/9/Edicoes/Revista_PMKT_003_02.pdf)
9. Bardin L. Análise de Conteúdo [Internet]. Lisboa: Edições 70; 2009 [accessed on 2016 Oct 15]. Available from: [https://www.researchgate.net/publication/329399124\\_Analise\\_de\\_Conteudo\\_consideracoes\\_gerais\\_relacoes\\_com\\_a\\_pergunta\\_de\\_pesquisa\\_as\\_possibilidades\\_e\\_limitacoes\\_do\\_metodo](https://www.researchgate.net/publication/329399124_Analise_de_Conteudo_consideracoes_gerais_relacoes_com_a_pergunta_de_pesquisa_as_possibilidades_e_limitacoes_do_metodo)
10. Instituto Nacional de Câncer. Conceito e Magnitude do câncer de mama [Internet]. 2018 [accessed on 2019 Aug 24]. Available from: <https://www.inca.gov.br/controle-do-cancer-de-mama/conceito-e-magnitude>
11. Hui D, Santos R, Chisholm G, Bansal S, Crovador CS, Bruera E. Bedside clinical signs associated with impending death in patients with advanced cancer: preliminary findings of a prospective, longitudinal cohort study. *Cancer.* 2015;121(6):960–7.
12. Prado E, Sales CA, Girardon-Perlini NMO, Matsuda LM, Benedetti GMS, Marcon SS, et al. Vivência de pessoas com câncer em estágio avançado ante a impossibilidade de cura: análise fenomenológica. *Esc Anna Nery.* 2020;24(2).
13. Otani MAP, Barros NF, Marin MJS. A experiência do câncer de mama: percepções e sentimentos. *Rev Baiana Enferm.* 2015;29(3):229–39.
14. Machado MX, Soares DA, Oliveira SB. Significados do câncer de mama para mulheres no contexto do tratamento quimioterápico. *Physis.* 2017;27(3):433-51.
15. Gobatto CA, Araujo TCCF. Religiosidade e espiritualidade em oncologia: concepções de profissionais da saúde. *Psicol USP.* 2013;24(1):11-34.
16. Oliveira VA, Oliveira TWN, Alencar MVOB, Cerqueira GS, Peron AP, Sousa JMC. Relação entre consumo alimentar da população nordestina e o alto índice de câncer gástrico nesta região [Internet]. 2014 [accessed on 2019 Sep 13];7(3). Available from: <http://www.repositorio.ufc.br/handle/riufc/10274>
17. Lee OP, Cesario FC. Relação entre escolhas alimentares e o desenvolvimento de câncer gástrico: uma revisão sistemática. *Braz J Health Rev.* 2019;2(4):2640–56.
18. Instituto Nacional de Câncer. Alimentação [Internet]. 2019 [accessed on 2020 Mar 21]. Available from: <https://www.inca.gov.br/alimentacao>
19. Xavier MF, Pereira PA, Pupo ACS, Silva MCR. Particularidades do enfrentamento psicológico a partir do diagnóstico de recidiva do câncer. *Bol Acad Paul Psicol.* 2015;35(89):409–23.
20. Arruda-Colli MNF, Lima RAG, Perina EM, Santos MA, Arruda-Colli MNF, Lima RAG, et al. A recidiva do câncer pediátrico: um estudo sobre a experiência materna. *Psicol USP.* 2016;27(2):307–14.
21. Morais ES, Muniz RM, Viegas AC, Cardoso DH, Santos BP, Pinto BK. Vivência da família na sobrevivência ao câncer: entre esperança de cura e medo da recidiva. *Rev Enferm Atenção Saúde* [Internet]. 2019 [accessed on 2019 Sep 8];8(1). Available from: <http://seer.uftm.edu.br/revistaeletronica/index.php/enfer/article/view/3344>

22. Oliveira DSA, Cavalcante LSB, Carvalho RT, Oliveira DSA, Cavalcante LSB, Carvalho RT. Sentimentos de Pacientes em Cuidados Paliativos sobre Modificações Corporais Ocasionadas pelo Câncer. *Psicol Ciênc Prof* [Internet]. 2019 [accessed on 2019 Sep 17];39. Available from: [http://www.scielo.br/scielo.php?script=sci\\_abstract&pid=S1414-98932019000100105&lng=en&nrm=iso&tlng=pt](http://www.scielo.br/scielo.php?script=sci_abstract&pid=S1414-98932019000100105&lng=en&nrm=iso&tlng=pt)
23. Pereira AD. Percepção de mulheres frente ao diagnóstico e tratamento do câncer de colo uterino [dissertation] [Internet]. São Luís: UFMA; 2019 [accessed on 2019 Sep 12]. Available from: <http://tedebc.ufma.br:8080/jspui/handle/tede/2703>
24. Silva JS. Trabalho, saúde e resiliência de cuidadores familiares de crianças e adolescentes em tratamento oncológico [dissertation] [Internet]. Santa Maria: UFSM; 2019 [accessed on 2019 Sep 15]. Available from: <http://repositorio.ufsm.br/handle/1/17093>
25. Karkow MC, Girardon-Perlini NMO, Stamm B, Camponogara S, Terra MG, Viero V. Experiência de famílias frente à revelação do diagnóstico de câncer em um de seus integrantes. *Rev Min Enferm*. 2015;19(3):741–51.
26. Goulart SA, Oliveira ACGA, Scorsolini-Comin F, Santos MA. Fatores relacionados aos casamentos de longa duração: panorama a partir de uma revisão integrativa. *Psico*. 2019;50(2):30370.
27. Silva CT, Terra MG, Kruse MHL, Camponogara S, Xavier MS. Residência multiprofissional como espaço intercessor para a educação permanente em saúde. *Texto & Contexto Enferm* [Internet]. 2016 [accessed on 2019 Sep 17];25(1). Available from: [http://www.scielo.br/scielo.php?script=sci\\_abstract&pid=S0104-07072016000100304&lng=en&nrm=iso&tlng=pt](http://www.scielo.br/scielo.php?script=sci_abstract&pid=S0104-07072016000100304&lng=en&nrm=iso&tlng=pt)
28. Pereira TIMM, Silva CRDV, Galiza DDF, Silva BN, Alencar RM, Vêras GCB. Mastectomia e o sistema de enfrentamento feminino: nuances do apoio social e familiar. *Rev Enferm Atual InDerme* [Internet]. 2019 [accessed on 2019 Sep 8];87. Available from: <https://revistaenfermagematual.com/index.php/revista/article/view/152>
29. Gonzalez P, Nuñez A, Wang-Letzkus M, Lim JW, Flores KF, Nápoles AM. Coping with Breast Cancer: Reflections from Chinese-, Korean-, and Mexican-American Women. *Health Psychol*. 2016;35(1):19-28.

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