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Feelings and Religiosity Interlacing in the Face of Breast Cancer Diagnosis: A Netnographic Study

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Abstract- Globally, female breast cancer exceeded lung cancer as the most commonly diagnosed cancer, with an estimated 2.3 million new yearly cases. This pathology produces profound changes in women's lives. Religiosity and spirituality are essential resources at diagnosis and when making therapeutic decisions. We aimed to analyze women's feelings in the face of breast cancer diagnosis and faith as an ally in confronting the disease. Netnographic research was conducted in February 2023 on the "Oncoguia" website from testimonials in the "Patient Space" section. We analyzed testimonials of women diagnosed with (healed or in treatment) breast cancer who mentioned in writing words about faith, religiosity, or spirituality. Two researchers read and analyzed the reports, organizing them into two themes: "Diagnosis and explosion of feelings" and "Faith: the greatest ally in the fight against cancer". We observed that multiple feelings emerge at diagnosis, including despair and uncertainties. In this process, faith is vital for deponents to favor the quality of life and confront breast cancer.

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I. INTRODUCTION

Globally, Female breast cancer has exceeded lung cancer as the most commonly diagnosed cancer, with an estimated 2.3 million new yearly cases (11.7%), followed by lung cancer (11.4%) (Sung et al., 2021).

Reproductive/hormonal and lifestyle-related aspects are among the risk factors. The former are early menarche, advanced menopause, age above 50, children, less breastfeeding, menopause hormone therapy, and the use of oral contraceptives. Alcohol intake, overweight, and physical inactivity are among the lifestyle-related factors. (Brinton et al., 2018).

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Despite the growing incidence, few preventive measures have been implemented besides the identification and surveillance of high-risk women genetically identified with BRCA1 and BRCA2 mutations (Rosenberg et al., 2016). A recent study observed that the religiosity-spirituality binomial could support and motivate women to seek a healthier life (Mirabi et al., 2022). However, this theme has been the subject of much research analyzing its importance in breast cancer diagnosis. One work noted that religiosity and spirituality assist in facing the disease, increasing the strength and hope toward healing for patients and their families (Falcão et al., 2022).

One study investigated the influence of faith and religiosity in patients diagnosed with breast cancer by analyzing spiritual well-being and the association of spirituality/religiosity and their practices with the acceptance of diagnosis, treatment adherence, and new perspectives. It noted that faith and religiosity are essential in confronting cancer. For this analysis, the authors used the Spiritual Well-Being Scale (SWBS), which refers to a bond of personal affinity with God or a supreme force. Patients also reported that only faith and religious practices make acceptance of diagnosis more manageable, and the most relevant points cited by patients were adequate adherence to treatment with positive recovery and positive outcome perspectives for their lives (Nakane, 2017).

Another research evaluated the association between religiosity, depression, and pain in breast cancer patients in 115 women from a radiotherapy unit, using the questionnaires: Santa Clara Strength of Religious Faith (Sherman et al., 2001), the Center for Epidemiological Studies Depression Scale (Hann et al., 1999) and the Visual Pain Scale of Goodwin et al. (2001). Religiosity was associated with a significantly lower prevalence of depression, and the latter was also associated with a higher pain level. Mastectomized patients of the high religiosity group were less depressed (Aukst-Margetić et al., 2005).

Brandão et al. (2021) conducted a cross-sectional study in Porto Alegre, Rio Grande do Sul, Brazil, with 108 women with cancer, and found a positive association between spirituality/religiosity and

quality of life in women with breast cancer subjected to radiotherapy.

One hundred fifty women diagnosed with breast cancer were evaluated after surgery for religiosity/spirituality, faith strength, belief in God, private and public practices, spiritual involvement, perceived spiritual support, and positive and negative religious coping strategies. 'Feeling punished and abandoned by God' corresponded to 5% of the variation in increased anxiety levels and was a significant independent predictor of depressed mood, explaining 4% of the variation (Thuné-Boyle et al., 2013).

Given the above, we question, 'What are the feelings expressed by women who receive a breast cancer diagnosis, and how does faith help them face the disease?'

Thus, this article aims to analyze women's feelings in the face of breast cancer diagnosis and faith as an ally in coping with the disease.

II. METHODS

a) Model of the Research

This netnographic research was conducted in February 2023 on the website of the "Oncoguia" Institute, which is a non-governmental organization that maintains, among its initiatives, an informative and interactive portal intended for the quality of life of people affected by cancer, their family members, and friends, health professionals, support network, and other interested parties. Data search was performed in the "Testimonials" of the "Patient Space" section. Testimonials from people with several types of cancer are available in this virtual environment. They are based on the following tag: "Tell us about your experience, leave your report, or simply fade! Help other people living the same story as you" (Oncoguia, 2022). The testimonials are made available with the deponent's name or nickname and a sentence the organizers call "review", which usually summarizes the posted text's main idea.

b) Research Steps

The steps of this netnographic research were as follows: selecting the site to be researched (Oncoguia) and defining the target audience (testimonials of women with a breast cancer diagnosis) and data of interest (reviews that presented testimonials with an approach on spirituality/religiosity). Initially, a visit was made to the Oncoguia website to read the testimonials posted on breast cancer. Then, we observed the reviews posted after the names or nicknames of the women who had left their testimonials on the site.

c) Sample

Testimonials of women diagnosed with (cured or undergoing treatment) breast cancer and who, right in the review, contained word(s) or expression(s) that

referred to faith, religiosity, or spirituality were considered for analysis, such as: "God", "thanks to God", "I have faith in God", "spirituality", "Jesus", and "faith". Testimonials that did not include any of these terms in the review were excluded, even considering that there could be some mention of "spirituality/religiosity" directly or in which the words mentioned were used in a figurative sense throughout the report.

Thus, we identified 17 written texts (narrative excerpts) aligned with the research question, which were considered for analysis.

d) Data Analysis

Two researchers read the testimonials, followed by the analysis and organization of the highlighted excerpts by the similarity of ideas, resulting in the following thematic categories: "Diagnosis and explosion of feelings" and "Faith: the greatest ally in the struggle against cancer". The content analysis method in the thematic modality was adopted for this purpose through the following stages: pre-analysis, material exploration, processing of the results, and interpretation (Minayo et al., 2013). We adopted Minayo's interpretive magnifying glass (Minayo et al., 2013).

e) Ethical Aspects

Even knowing that access to the testimonials is freely available to the community, letters followed by numbers were adopted to ensure their anonymity, where DM1 meant the testimonial of Woman 1, following the same rule for the next woman. As a result, this investigation did not require the Research Ethics Committee's opinion.

III. RESULTS AND DISCUSSION

a) Diagnosis and Explosion Of Feelings

Patients describe the moment of diagnosis as a journey affected by different medical stages. Each treatment phase has features that condition the experiences, triggering specific physical, emotional, cognitive, and social processes. (Ciria-Suarez et al., 2021).

A study with 339 women diagnosed with breast cancer showed the following characteristics of the sample: mean age of 58.9 years, 19.8% with higher education, 38.9% working, 64.9% married or living with a partner, 50.1% anxiolytic or antidepressant users, 34.9% were overweight, and 17.7% were smokers. In this population, the Quality of Life questionnaire of the European Organization for Research and Treatment of Cancer (EORTC) (Sprangers, 1996; Aaronson, 1993) was applied before and after treatment, with higher anxiety observed in married women, unemployed women, women on anxiolytic medication, and those with swollen breasts and advanced disease. It identified that anxiety decreases significantly between pre- and post-treatment (Villar et al., 2017)

I did all the tests within 15 days, and the diagnosis was confirmed since I didn't believe what I was hearing, and I thought I couldn't resist all that treatment because I have epilepsy and take three prescription drugs. (DM3)

I went into surgery a little dizzy after being diagnosed with breast cancer, without yet assimilating what was happening. It seemed like a dream (or a nightmare). (DM7)

(...) a small, benign-looking nodule appeared, but even so, she asked me to do a biopsy, and that was when I received the result in September. I received the diagnosis calmly at the time, but when I left the office, the penny dropped, and I cried a lot (...). (DM8)

(...) my reaction then was to cry and curse. Countless things go through your head when you receive a cancer diagnosis. I immediately thought I would die because we hear so many bad things about this disease when we are not involved. At that moment, doubts, uncertainties, and fear plagued my mind. (DM13)

I received the diagnosis of breast cancer back in September 2016. It is scary, my God! It hurts to remember even today. (DM14)

Falcão et al. (2022) observed that the negative feelings analyzed in the reports are often mitigated when women have greater spirituality and religiosity. Some testimonials express that faith, belief in God, and inner strength will help them overcome the disease, besides the importance of the network of friends, family, and therapeutic groups they participate in at the health units where they are or were treated.

Ciria-Suarez et al. (2021) state that the support network is essential in all cases. The family appears as one of the groups most involved in the illness process. Partners are fundamental, as the testimonials reveal several possibilities, ranging from the feeling of having had great support to the lack of attention and understanding that, in many situations, makes the relationship closer or terminates it. This support is essential given their reactions during treatment. *"I had many undesirable reactions, uncertainties, crying, but also a lot of support, affection, good humor, balance, learning (...)" (DM16).*

The moment of diagnosis leads to women having different experiences, ranging from euphoria regarding the discovery to despair and uncertainties, which characterizes an actual, primarily damaging "explosion of feelings". Family support, friends, and the entire support network are essential aspects to ease the emerging feelings in this context.

b) Faith: The Greatest Ally in the Fight Against Cancer

Most of the Brazilian population has some religiosity; faith is a strong ally in cancer treatment.

A survey conducted with cancer patients in Turkey points to the importance of religion as a

considerable component of the dominant culture, and it is understandable that "love for the family" seems to have played a role in its existential meaning, strengthening the confrontation of the problem (Ahmadi et al., 2019).

These findings reverberate in how people react and pronounce themselves regarding the disease. *"2% chance and still it [breast cancer] found me... Not for long! I have faith in my healing!" (DM1)*

Religiosity and spirituality usually connect the individual and a holy being or supernatural force. Religiosity is defined as how individuals express their spirituality through values, beliefs, and rituals (Inoue & Vecina, 2017). Spirituality, in turn, is represented by a belief system encompassing subjective aspects, resulting in vitality and meaning to life events, and one of the ways spirituality can be religion. (Saad et al., 2001).

A survey carried out through a cross-sectional analysis of Alberta's Tomorrow Project in Canada points out that the analysis of the connection between religion and health considers the following as important aspects: social support and coping resources, generating positive emotions and self-perceptions, and encouraging lifestyle choices that confer health benefits. All these aspects together indicate that the religiosity/spirituality relationship can provide additional motivation for women to acquire health-seeking behaviors (Mirabi et al., 2022).

A qualitative study conducted in Northeast Brazil to analyze the spiritual experience of women diagnosed with breast cancer and reflections on spirituality in healthcare observed that spirituality was a source of support during the breast cancer diagnosis. Some patients considered the spiritual dimension not only as a new purpose in life but also as a way of finding it and for other patients. From this perspective, spirituality was intrinsically linked to the religious context and belief in God, revealing itself as a source of hope, resignation, adoration, and gratitude for life (Leão, 2021).

In the participants' testimonials, God's relationship with healing is always present, and how religiosity/spirituality provides greater strength in the belief in the positivity of the treatment. Victory (cure) is certain even with all the difficulties, according to the participants who have faith.

I have a triple-positive wonderful God for a triple-negative breast cancer. (DM2)

God does not give us a greater burden than we can carry. (DM4)

Thanks be to God who gave me victory! (DM8)

Allied to psychotherapy, I realized that no situation in life, diagnosis, or illness is a death sentence and that I should (and will) fight until the end, when God, only God, can sentence me to leave the stage of life! (DM11)

(...) *I am at peace; my victory is guaranteed. My faith grows, and my God has not abandoned me!* (DM14)

The power of spirituality/religiosity in the coping processes used by people with (breast and prostate) cancer compared to those without cancer was studied by Arbinaga et al. (2021) in a sample of 445 Spanish participants (160 with cancer and 285 without). The authors observed a significant interaction between cancer and group belief, with religion, humor, and disconnection as coping strategies. The belief group scored significantly higher on active coping, planning, social support, and self-blame. Spirituality positively uses strategies such as religiosity, positive reappraisal, and acceptance.

The "positive" acceptance of cancer is seen as a life mission, and spirituality as an expression of identity and purpose through one's history and illness. Religious faith relieves suffering when the patient and family see that the disease is severe. (Aquino & Zago, 2007).

"Cancer does not only harm us. I, for one, benefited much more as I became a much better person and drew closer to God more than three times as much as before." (DM15)

Religiosity provides opportunities to re-signify a problematic situation, a path to access resources, and remain in the field of ego resilience. The construction of a religious meaning system can also be remembered, emphasizing religion's meaning-making and guiding function. (Szałachowski & Bogucka, 2023).

"I owe it to God because it was in Him that I put my faith that everything would happen according to His desire." (DM17).

Brandão et al. (2021) investigated the association between spirituality/religiosity and the quality of life of women with breast cancer undergoing radiotherapy. They found a positive association between spirituality/religiosity and the quality of life of women with breast cancer undergoing radiotherapy. Spirituality is a preponderant factor in the quality of life in oncological diseases, increasing the ability to cope with diseases, and the resilience of patients and caregivers (Brandão et al., 2021).

IV. CONCLUSION

This is the second article of a research project involving religiosity and spirituality in breast cancer. In the present study, analyzing the set of feelings emerging before breast cancer diagnosis, we observed that religious faith is vital for coping with the disease despite fear, despair, and uncertainties, favoring the treatment and quality of life.

Given the above, further studies are suggested to deepen the theme and inspire integrative health practices that consider spirituality/religiosity in therapeutic processes in oncology to offer more

significant backing to patients and their support network, be it family or not.

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