# Characteristics of multidimensional pain in women with breast cancer treated at a referral hospital: a cross-sectional study

Características da dor multidimensional em mulheres com câncer de mama atendidas em um hospital de referência: estudo observacional transversal

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# ABSTRACT

**BACKGROUND AND OBJECTIVES:** Pain is composed of multiple dimensions and can affect between 10% and 30% of women with breast cancer. This study evaluated physical, emotional, social, and spiritual pain components of women with breast cancer treated in a reference hospital complex in Pernambuco, Brazil.

**METHODS**: An observational, descriptive, and cross-sectional study was conducted with 43 women diagnosed with breast cancer and treatment started. Pain and its dimensions were assessed by using Numerical Rating Scale (NRS), Edmonton Symptom Assessment Scale (ESAS-r), part of the Brazilian version of McGill questionnaire (Br-MPQ), Spiritual Well-being Scale (SWBS) and a questionnaire for clinical and sociodemographic data.

**RESULTS**: The majority (79.07%) of women reported some pain at the time of the interview, with a mean of moderate pain intensity ( $5.28 \pm 3.54$ ). The most used expressions to describe the pain were: tiring (78.57%), nauseating (57.14%), acute (47.62) and suffocating (42.86%). The impact of pain on daily life affected the sub-items: sleep (67.44%), personal hygiene (44.18%), locomotion (48.83%), appetite/food (32.56%); in the social context 55.81% of the interviewees

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#### HIGHLIGHTS

• This article analyzed the multidimensional aspects of pain in patients diagnosed with breast cancer.

• All patients had physical, emotional, social, and spiritual complaints.

• Most healthcare professionals did not address the multidimensional aspects of pain.

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reported some degree of loss in work, 67.44% in leisure activities, 74.91% in domestic activities and 9.30% had early retirement. The spiritual/existential/religious scores were mostly positive.

**CONCLUSION:** Physical, emotional, social and spiritual complaints were present in women with breast cancer and indicates the need for an early approach to pain by health professionals, especially physicians.

**Keywords**: Breast neoplasms, Palliative care, Physician-patient relations, Spirituality, Women's health.

# RESUMO

**JUSTIFICATIVA E OBJETIVOS**: A dor é composta por múltiplas dimensões e pode afetar entre 10% e 30% das mulheres com câncer de mama. Este estudo avaliou a dor física, emocional, social e espiritual de mulheres com câncer de mama atendidas em um complexo hospitalar de referência em Pernambuco.

**MÉTODOS**: Foi realizado um estudo observacional, descritivo e transversal com 43 mulheres com diagnóstico de câncer de mama e tratamento iniciado. A dor e suas dimensões foram avaliadas por meio da Escala Visual Numérica (EVN), da *Edmonton Symptom Assessment Scale* (ESAS-r), de parte da versão brasileira do questionário McGill (Br-MPQ), além da Escala de Bem-Estar Espiritual (SWBS) e de um questionário contemplando dados clínicos e sociodemográficos.

**RESULTADOS**: A maioria (79,07%) das mulheres relatou alguma dor no momento da entrevista, com média da intensidade de dor moderada (5,28  $\pm$  3,54). As expressões mais utilizadas para descrever a dor foram: fatigante (78,57%), nauseante (57,14%), castigante (47,62) e sufocante (42,86%). O impacto da dor na vida diária afetou os subitens: sono (67,44%), higiene pessoal (44,18%), locomoção (48,83%), apetite/alimentação (32,56%); no contexto social 55,81% das entrevistadas relataram algum grau de perda no trabalho, 67,44% em atividades de lazer, 74,91% em atividades domésticas e 9,30% aposentaram-se antecipadamente. Os escores espirituais/existenciais/religiosos foram, em sua maioria, positivos.

**CONCLUSÃO**: Queixas físicas, emocionais, sociais e espirituais estiveram presentes em mulheres com câncer de mama, indicando a necessidade de abordagem precoce da dor pelos profissionais de saúde.

**Descritores**: Cuidados paliativos, Espiritualidade, Neoplasias da mama, Relação médico-paciente, Saúde da mulher.

# INTRODUCTION

Estimates indicated that in 2020 Brazil will have 66.280 new cases of malignant breast tumors, with an estimated risk of 61.61 cases per 100.000 women. In the state of Pernambuco, 2.390 cases are estimated<sup>1,2</sup>. According to data from the American Cancer Society, which also apply to Brazilian reality, approximately 1 in 8 women who live to 75 years will be diagnosed with the disease<sup>3</sup>.

There are factors related to an increased risk of developing breast cancer, including: female gender, advancing age, overweight and obesity after menopause, alcohol consumption, smoking, sedentary lifestyle, higher fat consumption, early menarche (before 12 years), late menopause (after 55 years), first pregnancy after 30 years, nullparity (not having had children), prolonged use (more than 5 years) of oral contraceptives and postmenopausal hormone replacement therapy, prior exposure to ionizing radiation and BRCA-1/BRCA-2 genetic mutations<sup>3,4</sup>. Assessment is a challenge in pain management. For its measurement, the patient's self-report, knowledge of the clinical case, evaluation of characteristics and repercussion in daily activities are considered<sup>5</sup>.

The literature on the subject recommends the use of validated scales that measure aspects of pain isolated or associated with variables not related to pain to achieve results. A study carried out with 400 women affected by breast cancer evaluated the influence of pain on quality of life. Using the McGill Pain Questionnaire, it was identified that 71% of them felt pain. Pain sensation was described as jumping, aching/painful and sharp stitches, negatively impacting quality of life<sup>6</sup>. Another study evaluated the interference of pain in patients' lives, using the Brief Pain Inventory (BPI) and identified that "mood", "normal work" and "sleep" were the elements most impacted by pain, thus evidencing other dimensions of pain7. Another study evaluated pain intensity in 160 patients with advanced breast cancer in an Indonesian hospital using the Visual Analogue Scale (VAS) and found low x scores  $(2.1 \pm 2.4)$  that indicate reasonable control of physical pain in this sample<sup>8</sup>.

Considering that the pain impact on each patient is related and reflects in its multidimensionality<sup>9</sup>, the concept of total pain includes physical, emotional, social and spiritual aspects<sup>9</sup>. Physical pain is an unpleasant sensory experience, recognized as the most obvious cause of suffering<sup>10</sup>, emotional or psychological pain refers to the fear of suffering and death, involves feelings of sadness, anger, rage, insecurity, despair, depression, repercussions in mood changes and hopelessness<sup>5,10</sup>.

Social pain, on the other hand, describes the fear of isolation and abandonment, dependence, uselessness, difficulty in communication, economic losses and loss of the social role played with family members and colleagues<sup>5,10</sup>. Spiritual pain contemplates personal questions of reason, meaning and satisfaction with life, it is reflected in the loss of meaning and meaning in life, in hope; it is the "pain of the soul"<sup>10,11</sup>. People with well-developed spirituality see a purpose in their lives, having a better quality of life<sup>12</sup>. The definition of total pain paved the way for Palliative Care (PC), which according to the World Health Organization (WHO) consists of an approach that aims to promote quality of life, both for patients with potentially fatal and/or at risk of life, and their families  $^{13}$ .

In this sense, since most studies that assess pain and breast cancer focus only on one or two aspects of pain, considering that breast cancer can trigger this multidimensional pain, greatly affecting the routine and image of femininity in women, in addition to making them question their beliefs and meaning of life, the objectives of this study were to assess total pain in women diagnosed with breast cancer treated in a reference hospital complex in the oncology area and to identify which strands of pain were addressed by health professionals<sup>14</sup>.

# **METHODS**

This work is an observational cross-sectional study and the STrengthening the Reporting of OBservational studies in Epidemiology (STROBE) checklist was used to report each part of this article<sup>15</sup>. This study was sent to the IMIP's (*Instituto de Medicina Integral Professor Fernando Figueira* – Professor Fernando Figueira Integrative Medicine Institute) Research Ethics Committee, and was approved in October/2019, under opinions 3.668.089 and CAAE. 17932019.4.0000.5201. The researchers followed the guidelines and regulatory standards recommended in CO-NEPs Resolution 466/12. Eligible patients read, signed, and received a Free and Informed Consent Term (FICT).

# Setting and participants

Between November 2019 and January 2020, women were evaluated through structured interviews while waiting for care in the Outpatient reception room of the Mastology Clinic of IMIP, in Recife, PE, Brazil.

This study used convenience and non-probabilistic sampling considering the homogeneity of the population and specialty of the service, including 43 participants. All women who were over 18 years of age, diagnosed with breast cancer, had done chemotherapy radiation therapy, and/or palliative treatment, had undergone a surgical procedure, such as mastectomy or conservative breast surgery, and were in follow-up visits or in treatment of postsurgical complications or local recurrences were considered eligible. Women with suspected lesion on imaging, but also without the histopathological diagnosis of breast cancer, with the diagnosis of benign lesions and/or impaired cognitive function were excluded.

#### Variables and measurement

Interviews were conducted individually, lasting approximately 1 hour. The following validated questionnaires were used: Numeric Rating Scale (NRS), Edmonton Symptom Assessment Scale (ESAS-r), part of the Brazilian version of the McGill questionnaire (Br-MPQ) and Spiritual Well being Scale (SWBS), as well as variables related to gynecological and obstetric history such as first pregnancy, number of children, long-term use of combined oral contraceptives (estrogen and progesterone) menarche age, age of menopause and hormone replacement therapy.

The NRS measures the intensity of physical pain at values contained on a scale from zero (no pain) to 10 (maximum pain)<sup>16</sup>. It is a precise and user-friendly tool. The responses obtained were classified as mild (1 to 3), moderate (from 4 to 6) and intense (from 7 to 10).

The MPQ is the most widely used multidimensional assessment tool for pain assessment. It has 78 descriptors that refer to sensory symptomatology and affective and evaluative dimensions of pain<sup>16</sup>. The questionnaire was divided into 20 categories. One word/expression must be chosen within each maximum. Each word has a number that represents its level of intensity. Categories 1 to 10 correspond to the sensory group, those from 11 to 15 to the affective group, 16 to the evaluative group and from 17 to 20 to the miscellany. The maximum number of selected expressions is 20<sup>16</sup>.

The ESAS-r evaluates the intensity of 10 symptoms, 9 of which are predefined and 1 subjective, which the patient deems relevant. For each symptom, a score should be assigned from zero to 10, with zero being its absence and 10 being its highest intensity<sup>16</sup>. The symptoms were grouped into mild (1 to 3), moderate (4 to 6) and intense (7 to 10).

The part of Br-MPQ applied by the study aims to verify how pain influences the daily life of patients. They must fill in the left side of this questionnaire, with numbers of 1 to 5, all gaps related to the social impairment, activities of daily living and the feeling of the other. On the right side, only the alternative with which they most related to should be chosen, in the questions about pain tolerance, feeling sick, feeling useful, and satisfaction with life.

The SWBS consists of 20 items, answered on a six-point Likert scale, ranging from "totally agree" to "totally disagree". The scale is subdivided into two subscales, with 10 items for the evaluation of religious well-being (RWB) and 10 items for measuring existential well-being (EWB). The scores of the two subscales are added to obtain the general measure of spiritual well-being (SWB). Scores on the total scale and subscales can be classified as high (100-120 on SWBS/50-60 on subscales), moderate (41-99/21-49) or low (20-40/10-20)<sup>17</sup>. High and negative scores were considered moderate and low, respectively.

Data related to sociodemographic were collected through a questionnaire prepared by the researchers containing information on gender, age, skin color, place of residence, marital status, religion, schooling and occupation, diet, physical activity, alcohol use, and smoking.

# Bias

After each scale/questionnaire was answered, patients were asked if certain strands of pain had already been evaluated by physicians or other healthcare professionals during the treatment of the neoplasm, through these same instruments or otherwise, and if they would like these dimensions to be considered.

# Statistical analysis

Descriptive statistics was used as a data analysis method. Questionnaire responses were entered into a spreadsheet built into the Microsoft Excel<sup>™</sup> program. Categorical data are represented as percentage, and mean scores of the questionnaires are presented as mean, standard deviation (SD), coefficient of variation, maximum and minimum values, and amplitude (difference between

maximum and minimum values). Data from questionnaires and scales were sent to descriptive statistical analysis (frequency and percentage) using the R software version  $4.0.0^{\text{TM}}$ .

# RESULTS

Regarding the sociodemographic profile of the participants, 43 women were included in the study, with a mean age of 54.53  $\pm$  8.62 years. More than a half (51.16%) reported brown skin color, 44.19% lived in Recife, 41.86% were married, 86.05% had children and 48.84% professed the protestant/evangelical religion. The age of the first pregnancy was 21.27  $\pm$  5.08 years, 86.05% lived with their family, 44.19% had an incomplete elementary school and 44.19% had a family income of 1 minimum wage. The most frequent professions/occupations were at home (41.86%) and liberal professionals (16.28%) and 65.12% reported being the main or only responsible for household tasks.

Most of the participants (93.02%) had some of the behavioral, hormonal, and reproductive risk factors for breast cancer, as noted in the literature; 41.86% were obese or maintained a diet rich in animal fat, 55.81% were sedentary, 27.91% reported drinking alcohol socially, 6.98% reported use of alcohol, 30.23% reported current or previous smoking, 23.26% had prolonged use of combined oral contraceptives (estrogen and progesterone) and 13.95% were nulliparas.

Among those who became pregnant, 5.41% had their first pregnancy after 30 years of age. Menarche occurred, on average, at  $12.74 \pm 1.89$ , and early menarche was observed in 27.91% of the cases. 93.02% of the participants went into menopause, with the mean age at which this process occurred at  $45.35 \pm 7.66$  years; among these, 7.5% had late menopause. Hormone replacement therapy was used by 11.63% of the patients.

Around 79% women reported physical pain, identifying severe pain in 51.16% of the participants by NRS (Table 1). The mean intensity of pain was  $5.28 \pm 3.54$ , therefore, considered moderate and 16.28% of the patients said that their physical pain had already been addressed by the physicians responsible during the breast cancer treatment process; 6.98% said that they had been examined by other health professionals, therapists, and psychologists in registered professions; 46.51% reported that physical pain had been addressed by physicians and 16.28% by physicians and other professionals.

**Table 1.** Pain intensity verified by the Numeric Rating Scale in womenwith breast cancer. Recife-PE, Brazil, 2020.

Pain intensity	n	%
Absence of pain	9	20.93
Mild pain	6	13.95
Moderate pain	6	13.95
Severe pain	22	51.16
Total	43	100.00

MPQ was only applied to participants who reported, through the NRS, feeling physical pain (79.07%). Frequencies of the 20 subgroups were calculated separately, considering that the total number of participants who responded to each subgroup varied. Using the MPQ, it was verified that 71 of 78 available descriptors were referred to pain, 39 referring to the sensory quality of pain, 12 to affective quality, 5 to evaluative quality and 10 to miscellaneous quality.

When analyzing the sensory characteristics of the painful symptom, it was observed that the descriptor "twinge" was the most present (88.89%), followed by "throbbing" (72.41%) and "thin" (67.74%). Regarding the affective characteristics of pain, "tiring" (78.57%), "nauseous" (57.14%), "punishing" (47.62%) and "suffocating" (42.86%) were reported more frequently among the participants. The descriptor "troublesome" was the most cited (34.38%) to qualify pain in relation to the evaluation pattern, followed by "boring" and "exhausting", with equal frequencies (25%). Regarding the descriptors of the mixed group, participants reported "boring" pain (59.26%), which "spreads" (51.85%) and "tightens" (33.33%).

The means of the amounts of sensory, affective, evaluative, and miscellaneous descriptors indicated by the participants were, respectively:  $8.53 \pm 2.07$ ;  $2.97 \pm 1.48$ ;  $0.94 \pm 0.23$  and  $2.70 \pm 1.29$ . The total mean number of reported descriptors was  $15.14 \pm 4.19$ . Less than 10% of patients said that the MPQ had already been used by physicians and 5.88% by other healthcare professionals. More precisely, 8.82% reported that the psychological characteristics of their pain had been evaluated by physicians and 5.88% by other professionals; while 94.12% considered it important to know these data for the treatment of breast cancer.

Among the 43 patients, the prevalence of moderate to severe symptoms (scores 4 to 10), verified by the ESAS-r, was mostly anxiety (48.85%), drowsiness (46.51%) and tiredness (44.2%) (Table 2). Furthermore, 30.23% of the participants reported another problem, constipation being the most frequent in this group (46.15%).

The presence of pain in ESAS-r was relevant (51.16%), but lower than the values obtained in the NRS (79.07%). In 55.81% of the women, the intensity of pain felt at the time of questionnaire application was lower than the intensity generally perceived and could even have been absent. On the other hand, 4.65% of the participants reported a higher value of ESAS-r.

Regarding the use of ESAS-r in evaluations, 6.98% of the participants said that they had already been evaluated with the instrument by physicians and 2.33% by other health professionals. A percentage of 41.86% reported that their symptoms were addressed otherwise by doctors and 2.33% by other professionals. The majority (95.35%) considered it important to know these data for the treatment of breast cancer.

Findings on the perception of the impact of pain on the social aspects of their lives, obtained by means of the Br-MPQ, showed that 55.81% of the patients reported a degree of injury at work, culminating in the loss of productive days in 32.56% of them and even 18.61% of loss of employment and 9.30% of early retirement. 67.44% reported that pain affected leisure activities and 74.91% household activities (Table 3).

Regarding the impact of pain on daily living of the patients studied, the sub items sleep (67.44%) and their first subdivisions of the insomnia (51.16%) and terminal insomnia (44.19%) also obtained an important percentage and sleep was classified as non-restorative by 58.14%. Personal hygiene was affected by pain in 44.18% of the participants, locomotion in 48.83%, and the act of dressing in 44.18% of the patients, while appetite/ feeding was the least affected (32.56%).

The feeling that breast cancer patients have about other people's behavior in relation to their pain showed that 39.54% of them believe that people are irritated, 53.49% express frustration, 18.61% feel anger about them, and 27.91% ignore them. This study also showed that 67.44% of patients have difficulty tolerating pain. However, only 34.88% feel sick. Of the total sample, 41.86% believe that they are less useful than before the disease and 27.91% think that their life is not completely satisfactory due to pain.

A percentage of 9.30% of the patients said that the BR-MPQ had already been used by physicians and 2.33% by other healthcare professionals. 13.95% reported that the influence of pain on daily life was addressed by physicians and 4.65% by other professionals. 97.67% would like physicians to consider the impact of pain/disease on their lives.

Regarding the performance in the SWBS, 90.70% of the participants had positive scores for spiritual well-being (SWB). On the existential well-being subscale (EWB), 74.42% obtained positive scores and, in relation to the religious well-being subscale (RWB), 97.67% obtained positive scores (Table 4).

Symptom	No sy	mptom	١	Vild	Мос	derate	Se	vere
	n	%	n	%	n	%	n	%
Pain	21	48.84	5	11.63	7	16.29	10	23.26
Tiredness	23	53.49	1	2.33	7	16.29	12	27.91
Sleepiness	23	53.49	-	-	10	23.26	10	23.26
Nausea	33	76.74	5	11.63	3	6.98	2	4.65
Lack of appetite	27	62.79	3	6.98	8	18.60	5	11.63
Shortness of breath	40	93.02	1	2.33	1	2.33	1	2.33
Depression	23	53.49	6	13.95	4	9.30	10	23.26
Anxiety	18	41.86	4	9.30	7	16.29	14	32.56
Well-Being	30	69.77	6	13.95	5	11.63	2	4.65

Table 2. Distribution of complaints of women with breast cancer according to intensity in the ESAS-r. Recife-PE, Brazil, 2020.

Table 3. Frequency distribution of responses to Br-MPQ sub items related to the evaluation of the impact of pain and its social impairment, in activities of daily living and in the feeling that patients have about people. Recife-PE, Brazil, 2020.

Impact of pain	No		A little		More or less		Very much		Totally/all the time	
	n	%	n	%	n	%	n	%	n	%
Social impairment: pain affects										
Work	19	44.19	3	6.98	4	9.30	4	9.30	13	30.23
Loss of working days	29	67.44	4	9.30	1	2.33	3	6.98	6	13.95
Health license	31	72.09	2	4.65	1	2.33	-	-	9	20.93
Job loss	35	81.40	-	-	-	-	1	2.33	7	16.28
Retirement	39	90.70	-	-	-	-	-	-	4	9.30
School activities	42	97.67	-	-	-	-	-	-	1	2.33
Leisure	14	32.56	8	18.60	10	23.26	7	16.28	4	9.30
Household activities	11	25.58	8	18.60	7	16.28	8	18.60	9	20.93
Family relationship	30	69.77	5	11.63	2	4.65	4	9.30	2	4.65
Relationship with friends	31	72.09	2	4.65	1	2.33	4	9.30	5	11.63
Activities of daily living: pain affects										
Sleep	14	32.56	4	9.30	10	23.26	4	9.30	11	25.58
Early insomnia	21	48.84	4	9.30	6	13.95	2	4.65	10	23.26
Terminal insomnia	24	55.81	3	6.98	10	23.26	2	4.65	4	9.30
Non-restorative sleep	18	41.86	6	13.95	6	13.95	3	6.98	10	23.26
Appetite/food	29	67.44	3	6.98	6	13.95	3	6.98	2	4.65
Personal hygiene	24	55.81	8	18.60	2	4.65	5	11.63	4	9.30
Dressing	24	55.81	7	16.28	7	16.28	2	4.65	3	6.98
Locomotion	22	51.16	4	9.30	4	9.30	5	11.63	8	18.60
Feeling of the other: people										
They get mad at me	26	60.47	7	16.28	5	11.63	2	4.65	3	6.98
Express frustration	20	46.51	13	30.23	5	11.63	2	4.65	3	6.98
They feel angry at me	35	81.40	2	4.65	1	2.33	3	6.98	2	4.65
Ignore me	31	72.09	6	13.95	3	6.98	-	-	3	6.98

# **Table 4.** Distribution of patients with respect to the Spiritual Well-Being Scale and its subscales. Recife-PE, Brazil, 2020.

Spiritual Well-being Scale (SWBS)	n	%
Spiritual well-being (SWB)		
Positive	39	90.70%
Negative	4	9.30%
Existential well-being (EWB)		
Positive	32	74.42%
Negative	11	25.58%
Religious well-being (RWB)		
Positive	42	97.67%
Negative	1	2.33%

In terms of SWB, 4.65% of the patients said that they had already been used by physicians and 11.63% by other health professionals, being a nurse, the profession mentioned by a participant; while 18.60% reported that their spirituality/religiosity was approached by physicians and 9.30% by other professionals. 86.05% would like their spiritual values to be considered by physicians.

# DISCUSSION

In line with the scientific literature, the present study pointed out that the majority of the participants had some behavioral, hormonal, and/or reproductive risk factors for breast cancer such as obesity, alcohol consumption, sedentary lifestyle, prolonged use of combined oral contraceptives<sup>18</sup>. Protestant/evangelical religion was the most declared (48.84%) by the patients, contrasting a study that found a prevalence of Catholic religion in similar cases<sup>19</sup>.

The present study found that moderate and severe pain was reported in 65.11% of the participants, being severe pain the most frequent (51.16%), unlike what was identified in a study, applied in 182 patients, which evaluated pain and fatigue in women with breast cancer, identifying that 27.47% of them had moderate and severe pain<sup>20</sup>.

A study in which the McGill scale was applied to cancer patients found data like the present study, identifying that among sensory, affective, evaluative, and miscellaneous categories, the descriptors "twinge", "tiring", "bothersome", and "boring" were the most found, despite greater variability in the evaluative and miscellaneous groups<sup>21</sup>. Anxiety was observed as the most reported problem in ESAS-r, followed by pain, unlike a similar study conducted with cancer patients, where pain was the main symptom, followed by malaise<sup>22</sup>. Other symptoms are consistent with the literature, with the most prominent tiredness, drowsiness, and sadness/depression, with equal frequencies and nausea and dyspnea being the least common. Constipation was the subjective symptom most reported, possibly because it had a prevalence of 80%-95% in cancer patients due to opioid use<sup>22</sup>.

This study identified housekeeping as the most frequent profession/occupation and that more than half of the patients were the main or only responsible for household chores, corroborating a still persistent thought in several societies that it is the woman's obligation to take care of all functions related to the home, even if she performs a profession outside this scope<sup>23</sup>.

Pain/disease was also observed to negatively affected the relationship of patients with family members and friends. In the literature, breast cancer is observed to influence sexuality and the relationship with the spouse, but that the relationship with family and friends tends to get stronger<sup>24</sup>. Authors of this research believe that this discrepancy is due to the Br-MPQ does not separate the relationship with the spouse from the relationship with the other family members, thus, the family relationship was shaken.

An interesting fact observed in this study is that even for a considerable number of participants who recognize the difficulties imposed on their lifestyle by breast cancer, 65.12% do not feel sick and 72.09% consider their lives to be completely satisfactory. In this sense, a study that measured quality of life and satisfaction with cancer treatment identified a trend towards satisfactory quality, with better emotional well-being in those who kept the breast and better social well-being in those who removed the breast<sup>25</sup>.

It was noticed that breast cancer produces a significant impact in women's lives, including in the psychosocial area, since the lesion presents itself in the most representative organ of femininity, sexuality, sensuality, beauty, and of motherhood<sup>14</sup>.

Change in body image has significant implications for the sexual and conjugal life of women, in addition to affecting relationships with their social circle and with themselves, influencing their self-esteem and feeling of femininity and can cause symptoms of anxiety and depression<sup>14</sup>. Women who experience breast cancer tend to feel socially stigmatized, discriminated against, in addition to having to redefine their routine based on multiple functions (professional, wife, mother, grandmother, among others), their future and their life projects<sup>26</sup>.

Spiritual well-being (SWB) of most participants was identified as high/positive and scores on the existential well-being (EWB) and religious well-being (RWB) subscales were primarily elevated; however, EWB subscales were identified with more negative scores than on the RWB subscales, corroborating findings from other studies<sup>17</sup>.

Therefore, this study showed, in agreement with the literature, that most of the women who participated in the investigation have developed religiosity, which usually influences their spirituality. Almost all participants had religion, with protestant/evangelical and catholic being the most frequent. Furthermore, the patients interviewed stated that they had a close relationship with God and a good perspective on their future; perceiving a meaning in their lives, considering it positive, which, as often demonstrated by research, helps cope with breast cancer and the physical, social, and psychological limitations that accompany the disease<sup>12,19</sup>.

Religious coping - through faith or through practices such as prayers and habitual church attendance - is ordinary in humanity, especially in Brazilian culture, being a crucial factor in the search for and maintenance of existential health, as it triggers more optimistic thoughts. Most people feel more under-the-top when they have a religious contribution, seeking answers in something divine/superior, which is usually the figure of God<sup>19,27</sup>. Spirituality and religiosity are strongly related to quality of life, as these concepts contemplate subjective well-being and therefore feelings of happiness and hope<sup>28</sup>. Therefore, it is increasingly necessary to know the demands of spiritual care of breast cancer patients. Thus, it is important that the health team develops a spiritual anamnesis of these patients. With the data collected during care, the professional can seek support for the beliefs of the patients, providing a welcoming environment in relation to what is important to them<sup>12</sup>.

Physical pain was the most addressed by physicians and other health professionals during care at the reference hospital. A considerable part of the women interviewed were not investigated for the other pain components, either in the instruments used by the present study or otherwise. Furthermore, most patients reported that they want these dimensions to also be considered in the breast cancer treatment process.

This research can help health professionals, in particular, physicians, whose specialties often deal with the terminality of life, reassess the current way of addressing the pain of women with breast cancer and seek, in future care, the establishment of an adequate professional-patient relationship, creating a more empathetic bond that will allow a global view of patients as biopsychosocial beings and, consequently, a more satisfactory treatment process. Early pain support programs can promote the development of better intervention strategies and adequate support to positively impact quality of life.

Furthermore, this study has some limitations that must be considered. The cross-sectional design and sample size do not allow establishing causal relationships between psychosocial factors and pain dimensions. Other limitations are related to the fact that the data were collected in a non-isolated waiting room environment, and the time taken to respond to the questionnaires was long, which may have affected the response due to tiredness or difficulty in concentration. In addition, there was no access to documented information on the clinical stage of the disease; if there were local recurrences, metastases, or postoperative complications, thereby preventing the validation of the information collected with the patients.

# CONCLUSION

In this study, patients diagnosed with breast cancer had physical, emotional, social, and spiritual complaints. Despite this, most of them highlighted that healthcare professionals did not address the multidimensional aspects of pain during consultations. Additional studies should investigate how professionals, especially physicians, approach the different dimensions of pain during cancer treatment and describe the strategies used to reduce the impacts on patients' lives.

# **AUTHORS' CONTRIBUTIONS**

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Statistical analysis, Data Collection, Conceptualization, Research, Methodology, Writing - Preparation of the original, Writing - Review and Editing

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