

# QUALITY OF LIFE OF WOMEN WITH BREAST CANCER RECEIVING CHEMOTHERAPEUTIC TREATMENT

## QUALIDADE DE VIDA DE MULHERES COM NEOPLASIA MAMÁRIA EM TRATAMENTO QUIMIOTERÁPICO

## CALIDAD DE VIDA DE MUJERES CON NEOPLASIA MAMÁRIA EN TRATAMIENTO QUIMIOTERÁPICO

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**Objectives:** to investigate the quality of life of women with breast cancer receiving outpatient chemotherapy. **Method:** longitudinal, analytical study with 48 women with mammary neoplasms. Data collection took place in three stages. The *Quality of Life Questionnaire - Core 30* and *Quality of Life Questionnaire - Breast Cancer* were used. The Friedman test, the Least Significant Difference, Spearman coefficient and the Kruskal-Wallis test were used in the analyses; *p* values < 0.05 were considered significant. **Results:** physical and social functions, fatigue, nausea and vomiting, body image and systemic effects showed statistically significant results during therapy, as well as the association between the variables age and physical function, and schooling and body image. **Conclusion:** the quality of life of women with breast cancer was compromised as a result of outpatient chemotherapy.

**Descriptors:** Nursing Oncology. Quality of Life. Breast neoplasms.

*Objetivos: investigar a qualidade de vida de mulheres com neoplasia mamária em tratamento quimioterápico ambulatorial. Método: estudo analítico, longitudinal com 48 mulheres com neoplasia mamária. A coleta de dados ocorreu em três etapas, com os Quality of Life Questionnaires - Core 30 e Breast Cancer. Foram utilizados os testes estatísticos de Friedman, Diferença Mínima Significativa, Spearman e Kruskal-Wallis; valores  $p < 0,05$  foram considerados significativos. Resultados: as funções física e social, a fadiga, náuseas e vômitos, a imagem corporal e os efeitos sistêmicos apresentaram resultados estatisticamente significantes durante a terapêutica, assim como a associação entre as variáveis idade e função física, e escolaridade e imagem corporal. Conclusão: a qualidade de vida das mulheres com neoplasia mamária foi comprometida em decorrência do tratamento quimioterápico ambulatorial.*

*Descritores: Enfermagem Oncológica. Qualidade de Vida. Neoplasias da Mama.*

*Objetivos: investigar la calidad de vida de mujeres con neoplasia mamária en tratamiento quimioterápico ambulatorial. Método: estudio analítico, longitudinal con 48 mujeres con neoplasia mamária. La recolección de datos fue en tres etapas, con los Quality of Life Questionnaires - Core 30 y Breast Cancer. Fueron utilizados los testes estadísticos de Friedman, Diferencia Mínima Significativa, Spearman y Kruskal-Wallis; valores  $p < 0,05$  fueron considerados significativos. Resultados: las funciones física y social, la fatiga, náuseas y vômitos, la imagen corporal*

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*y los efectos sistémicos presentaron resultados estadísticamente significantivos durante la terapéutica, así como la asociación entre las variables edad y función física, y escolaridad e imagen corporal. Conclusión: la calidad de vida de las mujeres con neoplasia mamaria fue comprometida en decurrencia del tratamiento quimioterápico ambulatorial.*

*Descriptores: Enfermería Oncológica. Calidad de Vida. Neoplasias de Mama.*

## Introduction

Breast cancer is a disease feared by women. It is commonly associated with physical mutilation and changes in lifestyle caused by late diagnosis and systemic effects of treatment. It is the second most frequent neoplasm in the world and the most common among women. It is regarded as the first cause of death for cancer in this population<sup>(1)</sup>.

As a target of constant implements in the last decades, the therapeutic approach for breast cancer includes local and systemic interventions, used independently or concomitantly. Surgery and radiotherapy are local interventions aimed at the removal or destruction of the neoplasm. Chemical, hormonal and biological therapy are systemic interventions that seek to control or destroy the neoplasm throughout the extension of the organism<sup>(2)</sup>.

Antineoplastic chemotherapy represents an advance in the cure and control of breast cancer, increasing the expectation and quality of life (QoL), but it causes toxicity due to its harmful effect on the cells of the organism. In view of the physical, emotional and social impact of oncologic therapy, the inclusion of measures aimed at the improvement of QoL is crucial to evaluate the dimensions of the disease and to create parameters for everyday healthcare practices in health services<sup>(3)</sup>.

Although there is a range of concepts and opinions and a lack of consensus on the definition of QoL, it is notable that all these concepts make references to the patient's perception of the disease, its treatment and its effects, with the possibility of covering varied meanings. The World Health Organization (WHO) defines QoL as "The individuals' perception of their position

in life in the context of the culture systems and value in which they live and in relation to their goals, expectations, standards and concerns"<sup>(4:1)</sup>.

In view of the growing need to better evaluate the QoL of patients with breast cancer undergoing chemotherapeutic treatment, it is evident that Oncology still needs better conditions that minimize the undesirable effects of the treatment and favor a more humanized approach. In Brazil, private centers make it easier to access information and health services and the search for professionals when any abnormality appears. The private system, therefore, facilitates the care that allows healthier living, with better QoL, earlier diagnoses and less aggressive treatments.

Thus, the objective of this research was to investigate the QoL of women with breast cancer receiving outpatient chemotherapy.

## Method

This is an analytical and longitudinal study with 48 women with breast cancer who started outpatient chemotherapy treatment from October 2012 to October 2013 at an oncology reference clinic providing care exclusively for private clients in southern Brazil. Eligibility criteria: women with histopathological diagnosis of breast cancer; proposal of chemotherapy treatment regardless the treatment line or clinical stage of the disease. Ineligibility criteria were: women who did not participate in the three proposed phases of data collection.

During the data collection, 52 women started the treatment in the service and all of them were invited to participate in the study before starting the chemotherapy. One woman refused

to participate and three did not complete all research phases. The study population consisted of 48 women and 144 questionnaires were applied and analyzed. Each participant answered the questionnaires on quality of life in each of the three treatment stages.

This study was approved by the Research Ethics Committee of the Clinical Hospital of the Federal University of Paraná, CAAE 00552012.4.0000.0096, under Opinion number 5301.

All the women invited to participate in the study signed an Informed Consent Form (ICF) before data collection. Three questionnaires were used: a sociodemographic and clinical characterization questionnaire, applied on the first day of treatment; the Quality of Life Questionnaire - Core 30 (QLQ C30), which is specific for assessing the general QoL of cancer patients, composed of 30 items that address the overall health status and the QoL, divided into five functional scales, three symptom scales and six individual items; and the Quality of Life Questionnaire - Breast Cancer (QLQ BR23), which is specific for patients with breast cancer, has 23 items divided into four functional scales and four symptom scales<sup>(5)</sup>.

Both European Organization for Research and Treatment of Cancer (EORTC) questionnaires, the QLQ C30 and QLQ BR23, were applied at three different moments. The first stage took place on the first day of chemotherapy; the second, 40 to 50 days after the first stage; and the third, 40 to 50 days after the second stage. These stages were determined by the causality of adverse effects.

Sociodemographic and clinical data were evaluated through absolute and relative frequency. The QoL questionnaire results were grouped into the respective scales, expressed in scores that ranged from 0 to 100, as described in the EORTC Scoring Manual<sup>(6)</sup>. For functional scales and overall health, higher scores represent higher level of functionality and better overall condition, respectively. For symptom scales,

larger scores represent more symptomatology or problems.

The non-parametric Friedman test was used in each score to compare stages, complemented by the Least Significant Difference test of multiple comparisons (*p* value). Results with *p* value < 0.05 were considered significant. For the association between the sociodemographic variables and the QLQ C30 and QLQ BR23 variables, the non-parametric Spearman coefficient and Kruskal-Wallis (KW) test were used.

## Results

The mean age of the women was 46 years, varying from 24 to 69 years. They were married or in common-law marriage (66.5%) and 90% had 1 to 3 children. They had completed higher education (54%) and 56.5% declared themselves to be active. With regard to monthly family income and income *per capita*, an average of 12 minimum wages and 4 minimum wages, respectively, were found, based on the minimum salary in force during the data collection period (R\$ 678.00).

Regarding clinical data, the time elapsed between diagnosis and the beginning of chemotherapy was 0 to 8 months, with 35.5% of the women starting therapy within one month after diagnosis. Among participants, 62.2% had adjuvant treatment, 39.5% were in clinical stage III and 54% had undergone the therapeutic protocol based on anthracyclines and taxanes. Comorbidities were present in 31.5% of the women, with prominence for systemic arterial hypertension in 14.5%. Regarding life habits, 10.5% of the patients were smokers, 12.5% used to drink alcohol moderately, and 56.5% did not engage in physical activity.

The results for the QLQ C30 and QLQ BR23 questionnaires collected in the three stages of the research are shown in Tables 1 and 2, with the variations of the descriptive measures in each stage.

**Table 1** – Descriptive data of the *Quality of Life* Questionnaire - Core 30 (QLQ C30) obtained in the three stages of the research. Curitiba, Paraná, Brazil – 2014. (N=48)

Scores	1st stage			2nd stage			3rd stage		
	Mean	Min-Max	Standard Deviation	Mean	Min-Max	Standard Deviation	Mean	Min-Max	Standard Deviation
Overall Quality of Life	76.22	0 - 100	22.21	75.17	33 - 100	16.89	73.96	33 - 100	18.56
<b>Functional Scale</b>									
Physical function	88.85	53 - 100	14.52	81.28	33 - 100	18.52	78.89	33 - 100	20.04
Personal performance	89.93	0 - 100	20.55	82.29	17 - 100	23.67	81.94	0 - 100	25.92
Emotional function	65.80	0 - 100	27.68	69.21	0 - 100	27.20	64.24	0 - 100	28.56
Cognitive function	80.56	0 - 100	27.79	79.17	0 - 100	25.84	75.35	0 - 100	26.63
Social function	82.29	0 - 100	27.59	77.43	0 - 100	25.38	69.79	0 - 100	29.71
<b>Symptom scale/Items</b>									
Fatigue	15.28	0 - 100	22.06	29.86	0 - 100	24.49	32.18	0 - 100	24.61
Nausea and vomiting	5.90	0 - 100	17.36	16.32	0 - 100	21.05	13.54	0 - 83	18.72
Pain	12.50	0 - 67	19.30	15.28	0 - 67	20.87	18.75	0 - 100	24.22
Dyspnea	8.33	0 - 100	22.28	11.11	0 - 67	21.01	13.19	0 - 100	25.49
Insomnia	35.42	0 - 100	32.55	31.91	0 - 100	36.75	34.03	0 - 100	33.33
Loss of appetite	13.89	0 - 100	27.36	15.97	0 - 67	20.62	13.89	0 - 67	21.56
Constipation	25.69	0 - 100	33.15	27.78	0 - 100	32.50	25.69	0 - 100	31.69
Diarrhea	1.39	0 - 33	6.73	4.96	0 - 100	16.99	8.33	0 - 67	17.53
Financial difficulties	15.28	0 - 100	28.32	10.42	0 - 67	19.64	14.58	0 - 100	24.70

Source: Created by the authors.

**Table 2** – Descriptive data of the *Quality of Life Questionnaire - Breast Cancer* (QLQ BR23) obtained in the three stages of the research. Curitiba, Paraná, Brazil – 2014. (N=48)

Scores	1st stage			2nd stage			3rd stage		
	Mean	Min-Max	Standard Deviation	Mean	Min-Max	Standard Deviation	Mean	Min-Max	Standard Deviation
<b>Functional Scale</b>									
Body image	90.43	0 - 100	19.50	75.00	0 - 100	27.98	72.57	0 - 100	27.98
Sexual function	65.96	0 - 100	27.13	65.58	0 - 100	25.19	65.93	0 - 100	28.19
Sexual satisfaction	31.18	0 - 100	29.73	36.90	0 - 100	33.13	44.83	0 - 100	32.46
Future perspective	46.53	0 - 100	40.53	45.14	0 - 100	39.79	45.83	0 - 100	37.43
<b>Symptom scale</b>									
Systemic effects	7.41	0 - 52	11.10	34.28	0 - 86	21.11	38.01	0 - 86	19.35
Symptoms of breast	22.05	0 - 75	21.50	17.53	0 - 100	21	16.38	0 - 50	15.25
Symptoms in the arm	22.22	0 - 100	25.17	18.06	0 - 89	20.96	18.98	0 - 67	19.03
Hair loss	3.92	0 - 33	11.07	45	0 - 100	40.33	34.29	0 - 100	43.15

Source: Created by the authors.

Statistically significant results of the QLQ C30 and QLQ BR23 questionnaires in the three stages of the research can be seen in Table 3.

**Table 3** – Significant scores of the QLQ C30 and QLQ BR23 questionnaires obtained in the three stages of the research. Curitiba, Paraná, Brazil - 2014. (N=48)

<i>Quality of Life Questionnaire - Core 30 (QLQ C30)</i>									
Scores	1st stage	2nd stage	p value	1st stage	3rd stage	p value	2nd stage	3rd stage	p value
<b>Functional Scale</b>									
Physical function	88.85	81.28	**	88.85	78.89	0.00056*	81.28	78.89	**
Social function	82.29	77.43	**	82.29	69.79	0.00551*	77.43	69.79	**
<b>Symptom scale/Items</b>									
Fatigue	15.28	29.86	0.00001*	15.28	32.18	0.00001*	29.86	32.18	**
Nausea and vomiting	5.9	16.32	0.00046*	5.9	13.54	0.00046*	16.32	13.54	**
<i>Quality of Life Questionnaire - Breast Cancer (QLQ BR23)</i>									
Scores	1st stage	2nd stage	p value	1st stage	3rd stage	p value	2nd stage	3rd stage	p value
<b>Functional Scale</b>									
Body image	90.43	75	0.00003*	90.43	72.57	0.00003*	75	72.57	**
<b>Symptom scale</b>									
Systemic effects	7.41	34.28	0.00001*	7.41	38.01	0.00001*	34.28	38.01	**

Source: Created by the authors.

\* statistically significant; \*\* not significant.

After the descriptive analysis of the data, the association between the sociodemographic variables that diverged from the profile found in the literature with the QLQ C30 and QLQ BR23 variables that were statistically significant at each stage of the treatment was tested. The

associations were carried out in the three stages of the research seeking to verify if they had an impact on the QoL of the women and at what moment this occurred. Results can be seen in Table 4.

**Table 4** – Descriptive data of the association between sociodemographic variables the QLQ C30 and QLQ BR23 variables in the three stages of the research. Curitiba, Paraná, Brazil - 2014. (N=48) (to be continued)

<i>Quality of Life Questionnaire - Core 30 (QLQ C30)</i>							
Sociodemographic variables	Variables	1st stage		2nd stage		3rd stage	
		Spearman coefficient	p value	KW *	p value	KW *	p value
Age	Physical function	-0.159	0.281	-0.296	0.041**	-0.125	0.398
	Social function	-0.098	0.508	-0.133	0.368	0.111	0.451
	Fatigue	-0.009	0.949	0.016	0.911	-0.011	0.941
Occupation	Physical function	6.038	0.110	1.97	0.579	0.873	0.832
	Social function	3.938	0.268	3.425	0.331	0.006	0.999
	Fatigue	1.334	0.721	3.271	0.352	0.793	0.851

**Table 4** – Descriptive data of the association between sociodemographic variables the QLQ C30 and QLQ BR23 variables in the three stages of the research. Curitiba, Paraná, Brazil - 2014. (N=48) (conclusion)

<i>Quality of Life Questionnaire - Core 30 (QLQ C30)</i>							
Sociodemographic variables	Variables	1st stage		2nd stage		3rd stage	
		Spearman coefficient	p value	KW *	p value	KW *	p value
Schooling	Social function	2.518	0.472	7.603	0.055	2.044	0.563
	Fatigue	3.034	0.386	7.661	0.054	4.845	0.183

  

<i>Quality of Life Questionnaire - Breast Cancer (QLQ BR23)</i>							
Sociodemographic variables	Variables	1st stage		2nd stage		3rd stage	
		Spearman coefficient	p value	KW *	p value	KW *	p value
Age	Treatment effects	0.221	0.132	0.256	0.079	0.050	0.736
	Body image	-0.221	0.136	0.136	0.357	0.125	0.399
Occupation	Treatment effects	5.757	0.124	5.673	0.129	0.501	0.919
	Body image	5.285	0.152	0.366	0.947	4.556	0.207
Schooling	Body image	8.566	0.036 **	2.975	0.395	3.655	0.301

Source: Created by the authors.

\* Kruskal-Wallis; \*\* statistically significant.

## Discussion

Breast cancer is a fearful experience among women and requires full and targeted care at each stage of therapy. For this reason, Oncology Nursing has expanded its work with these women aiming to integrate the care performed to better QoL conditions. Nurses have sought to provide an individualized care that meets the needs of the patients in a holistic way and facilitates their adaptation to the moment experienced.

The results of this study showed the occurrence of breast cancer in an age group below the Brazilian average (50 years), a fact considered uncommon in the literature, representing 5 to 7% of the cases<sup>(1,7)</sup>.

The predictive statistics of breast cancer in relation to age have changed and the results of this research corroborate the information found in a study carried out in California where age groups below 50 years predominated, and the number of cases increased proportionally to the age of the women<sup>(8)</sup>. However, some studies contrast to the present findings, reporting age groups over 50 years, with means of 61.8 years

in Sweden<sup>(9)</sup>, 57 in Chile<sup>(10)</sup>, 58.4 in France<sup>(11)</sup> and 58 in the United States<sup>(12)</sup>.

Breast cancer in young women is still poorly understood. It is believed to be a biologically more aggressive disease, with adverse histopathological characteristics and worse prognoses when compared to women aged over 50 years<sup>(8)</sup>.

Another important factor that should integrate prevention and tracking strategies is related to the educational level of these women. In this study, women with complete higher education were majority. This diverges from the results found in the literature, where primary and secondary education have been reported as prevalent<sup>(7,13-15)</sup>. The level of education contributes to better QoL conditions for women with breast cancer. Education favors the understanding of information related to early diagnosis, treatment and lifestyle changes.

Economically active women corresponded to 56.5% of the sample, with high average family and *per capita income*, different from the usual economic situation reported in the Brazilian literature<sup>(13,15)</sup>. Authors highlight the association

of these variables with schooling, since women with high levels of education may have better professions/occupations and profitability, which subsidizes a better socioeconomic standard. This fact favors therapy and contributes to better living conditions and health<sup>(16)</sup>.

In contrast, economically active and productive women suffer a greater impact on the QoL in the face of diagnosis and treatment. Such impact is triggered by the feeling of impotence in the face of the disease, the changes in the social and family life, and fear of the future due to the uncertainty faced in the present, since they conciliate the work activities and the therapy<sup>(15)</sup>.

Regarding the lifestyle habits observed in the present study, it is noteworthy that the smokers or women who drink alcoholic beverages corresponded to 75% and 83.5% of the sample, respectively, and 56.5% of the patients did not perform physical activity. According to the *International Agency for Research on Cancer* (IARC), alcoholism and sedentary lifestyle are risk factors for breast cancer, increasing the risk for development of the disease when there is an association between them. However, smoking is currently recognized as a carcinogen with limited evidence of increased risk for breast cancer in humans<sup>(17)</sup>.

The time elapsed between the diagnosis and the start of the antineoplastic treatment contributes to better therapeutic results, longer survival and better QoL. In this study, the onset of therapy within one month after diagnosis was the case of 37.5% of women and the average was 2.7 months. In the United States, the mean time to start therapy after diagnosis has been reported to be 3 months<sup>(18)</sup>, while in Canada is 1-2 months<sup>(19)</sup> and in the UK, it is approximately 2.5 months<sup>(20)</sup>.

QoL is a predictive factor of well-being, besides being a constant concern in the search for a healthy life. Given the impact of diagnosis and of the treatment on the life of women with breast cancer, it is essential that QoL be valued and considered in all phases of the therapy. According to the *EORTC Scoring Manual*<sup>(6)</sup>, QoL is a broad and subjective construct, and

the overall health status found in the QLQ C30 should be used as a summary measure of the overall QoL of cancer patients.

In the present study, it was observed that the overall health status detected by the QLQ C30 was considered good by the participants, remaining above 70% in all stages. Studies conducted in the United States<sup>(12)</sup> and in Brazil<sup>(13)</sup> showed an average over 80% in relation to the overall QoL of the participants, indicating good life and health conditions of the women affected. Studies carried out in Sweden<sup>(9)</sup> and in Asia<sup>(21)</sup> have shown that the overall health status is satisfactory among women with breast cancer, with a mean of 65% and 63.93%, respectively.

Based on the functional scales of the QLQ C30, a *deficit* in the physical and social functions happens in the course of the therapy, with a decrease of average values in each stage. The decrease was statistically significant between the first and third stages, indicating impairment in QoL in relation to these functions. These data corroborate a study carried out with 42 women with breast cancer in Brazil in which the participants presented impaired physical and social functions, with mean values of 60.5% and 64.5%, respectively<sup>(3)</sup>.

On the other hand, a Swedish study observed scores above 80% in the physical function among Swedish women and mean values over 75% for the social function, indicating no impairment of QoL in relation to these functions<sup>(9)</sup>. Similar results were found in a study conducted in Malaysia, with mean values above 75% for physical and social functions, which positively characterizes the maintenance of living conditions and of social and leisure activities among the women affected by the disease<sup>(22)</sup>.

Breast cancer is still a stigmatized pathology that causes functional losses and relevant social changes, as well as important modifications in the way of living. These factors lead to a significant negative impact on the QoL. Being under specialized treatment does not prevent women to go on with their routine activities. Yet, some care measures aimed at facilitating the adaptation to the reality experienced, preventing

complications, and stimulating independence and autonomy may be necessary.

The analysis of the QLQ C30 symptom scales showed that there was an increase in the symptomatology related to fatigue, nausea and vomiting throughout the therapy. Studies carried out in Sweden<sup>(9)</sup> and in India<sup>(23)</sup> have cited fatigue as one of the most incident symptoms among women, compromising the QoL in this domain.

The most effective measure to combat fatigue is to perform physical exercises regularly. Physical activity increases functional capacity, reduces stress and improves the QoL of women affected by breast cancer<sup>(24)</sup>. For this, it is necessary that nurses stimulate the realization of daily physical exercise, guiding on the importance of such in to withstand fatigue and other symptoms that can compromise the daily life and the QoL.

It is important to emphasize that the characteristics of each woman are unique and may intensify or attenuate the peculiar symptomatology of the treatment. In this research, the association between the sociodemographic variables age, occupation and schooling with the variables physical function, social function and fatigue of the QLQ C30 questionnaire was performed in each stage of the treatment. The association between the age and physical function was statistically significant in the second stage of the study, denoting that younger women experienced greater physical impairment. This fact is corroborated by the literature, which indicates the link between breast cancer in younger ages and worst prognosis. These cases require more aggressive treatments and, for lack of alternatives, mutilating procedures, predisposing to physical and limiting impairments in routine activities, which certainly has a strong impact on QoL<sup>(14)</sup>.

Therapy for breast cancer may affect several dimensions of the female life, directly related to the symptomatology and the perception of the body image. When analyzing the functional scales of the QLQ BR23, a statistically significant decline in body image scores was noticed in the course of the therapy. These data are in contrast with a study conducted in the United

States where mean scores between 69% and 90% for body image were found, indicating better coping in this domain<sup>(12)</sup>. In France, although the mean values were high, a decline was observed after starting the treatment (from 90% to 70%), indicating QoL impairment due to therapy<sup>(11)</sup>.

The change in the body image is a worrying and unique factor for each woman. The patient perceives the mammary neoplasm as something unexpected, threatening, capable of harming the integrity and the proof of the female existence, as the breast represents the symbolism and the concept that the women have of themselves. The association between the variables schooling and body image was statistically significant in the first stage. This indicates that women with higher level of schooling presented greater impairment of the QoL when the body image was altered as a result of the therapeutics<sup>(16)</sup>.

The importance that women attribute to their physical appearance is highlighted in the literature, as well as the need to camouflage bodily alterations in order to preserve their privacy in social life or restore an appearance close to the ideal of beauty and femininity prevailing in the society<sup>(25)</sup>.

As care professionals, nurses must establish an affective and conscious relationship with the patients in order to assist them in coping with tension and interacting with other people. Nurses must also help them to adjust to what they cannot change at the moment, positively impacting on their way of living.

Regarding the limitations of the study, the lack of research developed with women assisted at private institutions made it difficult to compare parameters, such as study design, number of participants and time between the stages and data collection.

## Conclusion

This research investigated the possible impacts of breast cancer and antineoplastic treatment on the QoL of women. These were perceived in physical and social function and body image. Furthermore, the symptomatic appearance of

fatigue, nausea and vomiting, side effects of the therapy, and loss of hair also affected negatively the QoL.

Thus, the multidimensional construct of the QoL makes it possible to reflect on the care currently provided by nursing professionals. The treatment-related symptomatology is the main focus of their guidelines. However, monitoring the impact of the disease from the perspective of the patient calls for improvements and adequacy of the practices carried out, aiming at the promotion of well-being and adaptation to the chemotherapeutic treatment.

Nursing actions should seek a balance between the maintenance of the physical, emotional and social dimensions of the affected women and the adequate management of the symptomatology. Individualized nursing care, focusing not only on the occurrence of side effects, but on the conditions that must be maintained despite therapy, must be sought.

It should be emphasized that the results of this study should be interpreted with caution, as they cannot be generalized for the entire population with breast cancer. Further research is needed to help nurses better understand and evaluate the QoL of women with breast cancer, in order to identify possible interventions aimed at the maintenance of their well-being.

However, this research corroborates the Clinical Practice Policies of Nursing and Health that aim at the comprehensive assistance to patients, considering their own perception of the therapy and the impact that this causes in their lives.

### Collaborations

1. conception, design, analysis and interpretation of data: Sabrina Nunes Garcia and Luciana Puchalski Kalinke;

2. wording of article and relevant critical review of the intellectual content: Sabrina Nunes Garcia; Luciana Puchalski Kalinke; Jorge Vinícius Cestari Félix; Maria de Fátima Montovani and Mariluci Alves Maftum;

3. final approval of the version to be published: Sabrina Nunes Garcia and Luciana Puchalski Kalinke.

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