ADJUVANT AND NEO ADJUVANT CHEMOTHERAPY AND THE IMPLICATIONS IN THE QUALITY OF LIFE WOMEN WITH BREAST CANCER

TRATAMENTO QUIMIOTÉRÁPICO ADJUVANTE E NEOADJUVANTE E AS IMPlicações NA QUALIDADE DE VIDA MULHERES COM CÂNCER DE MAMA

TRATAMENTO QUIMIOTERÁPICO ADJUVANTE Y NEO ADJUVANTE Y LAS IMPLICACIONES EN LA CALIDAD DE VIDA DE MUJERES CON CÁNCER DE MAMA

Raquel de Castro Figueiredo Pereira Coelho¹, Mariluci Sanches Panobianco², Paulo Ricardo Bittencourt³, Mariluci Alves Maftum³, Pamella Naiana Dias dos Santos⁴, Luciana Puchalski Kalinke⁵

ABSTRACT
Objective: to evaluate the implications of adjuvant and neoadjuvant chemotherapy treatment on the quality of life of women with breast cancer. Method: a quantitative, observational, longitudinal and analytical study performed at a university reference hospital, in the South of Brazil, with 67 women who started chemotherapy. A total of 197 questionnaires were collected in three treatment stages, using questionnaires from the European Organization for Research and Treatment of Cancer. Results: emotional function was significantly affected in both treatment modalities. However, physical, cognitive and personal performance were compromised in neoadjuvant therapy. Conclusion: the quality of life was altered with greater loss for the women who started the neoadjuvant therapy in relation to the adjuvante. Descriptors: Quality of Life; Oncologic Nursing; Breast Neoplasms; Drug Therapy.

RESUMO
Objetivo: avaliar as implicações do tratamento quimioterápico adjuvante e neoadjuvante na qualidade de vida de mulheres com câncer de mama. Método: estudo quantitativo, observacional, longitudinal e analítico, realizado em um hospital de referência universitário, no Sul do Brasil, com 67 mulheres que iniciaram o tratamento quimioterápico. Foram coletados 197 questionários em três etapas do tratamento, utilizando os questionários da European Organization for Research and Treatment of Cancer. Resultados: a função emocional foi afetada significativamente em ambas as modalidades de tratamento. Entretanto, as funções física e cognitiva e o desempenho pessoal foram comprometidos na terapêutica neoadjuvante. Conclusão: a qualidade de vida foi alterada com maior prejuízo para as mulheres que iniciaram a terapêutica neoadojuvante em relação à adjuvância. Descritores: Qualidade de Vida; Enfermagem Oncológica; Neoplasias da Mama; Quimioterapia.

RESEÑA
Objetivo: evaluar las implicaciones del tratamiento quimioterapéutico adyuvante y neo adyuvante en la calidad de vida de mujeres con cáncer de mama. Método: estudio cuantitativo, observacional, longitudinal y analítico, realizado en un hospital de referencia universitaria en el sur de Brasil con 67 mujeres que iniciaron el tratamiento quimioterapéutico. Se recolectaron 197 cuestionarios en tres etapas del tratamiento, utilizando los cuestionarios de la European Organization for Research and Treatment of Cancer. Resultados: la función emocional fue afectada significativamente en ambas modalidades de tratamiento. Sin embargo, la función física, la cognitiva y el desempeño personal se comprometieron en la terapia neo adyuvante. Conclusión: la calidad de vida fue alterada con mayor perjuicio para las mujeres que iniciaron la terapia neo adyuvante en relación a la adyuvante. Descriptores: Calidad de Vida; Enfermería Oncológica; Neoplasias de La Mama; Quimioterapia.

¹Nurse, Master, Post-Graduate Program in Nursing / PPGENF, Federal University of Paraná / UFPR. Curitiba (PR), Brazil. E-mail: raque.gabri@hotmail.com; ²Nurse, Professor, PhD, School of Nursing of Ribeirão Preto / EERP, University of São Paulo / USP. Ribeirão Preto (SP), Brazil. E-mail: marislei@eerp.usp.br; ³Statistician, Professor, PhD, Federal University of Paraná / UFPR. Curitiba (PR), Brazil. E-mail: guimaraes.prbi@gmail.com; ⁴Nurse, PhD, Professor, Postgraduate Program in Nursing / PPGENF, Federal University of Paraná / UFPR. Curitiba (PR), Brazil. E-mail: mmaftum@ufr.br; ⁵Nurse, Master, Post-graduate Program in Nursing / PPGENF, Federal University of Paraná / UFPR. Curitiba (PR), Brazil. E-mail: pamella.nds@gmail.com; ⁶Nurse, Professor, PhD, Postgraduate Program in Nursing / PPGENF, Federal University of Paraná / UFPR, Curitiba (PR), Brazil. E-mail: lucianakalinke@yahoo.com.br
INTRODUCTION

Quality of life (QoL) is a subjective and multidimensional construct that compiles the individual in its physical, psychological and social aspects and enables the measurement of results and interventions. In addition, it enables the evaluation of survival and treatment experiences from a patient.

In breast cancer, QoL measurements are used to evaluate results and propose actions that help in the physical and emotional recovery of patients, since this is a stigmatizing disease, which evokes anxieties, physical and psychosocial concerns. Therapy is aggressive, and includes local interventions such as surgery and radiotherapy, and systemic interventions such as chemotherapy, hormone therapy and biological therapies, alone or in combination.

Chemotherapy treatment is widely used to reduce recurrence, aiming at the survival and QoL of women with breast cancer. It can be classified as adjuvant, neoadjuvant and palliative.

Adjuvant chemotherapy is performed after surgery to eliminate micrometastases. It is usual for early cases and reduces recurrence and mortality. Neoadjuvant therapy is applied before surgery to reduce the tumor or to allow conservative surgeries. It is indicated for tumors locally advanced, allows assessment of the prognosis and the development of new therapies.

Despite its benefits, chemotherapy has adverse reactions related to the agents used, whose toxicities negatively affect the lives of women, with physical, emotional, economic and social impacts. These impacts must be managed by professionals who work in oncology. However, in Nursing practice, care is often focused on physical aspects, and other aspects such as emotional, social and cognitive aspects are little discussed. QoL studies indicate that these functions are compromised and require the attention of professionals to provide effective and quality care.

QoL, due to its multidimensionality, makes it possible to identify these aspects affected by the chemotherapeutic treatments indicated in breast cancer therapy. Studying it extends the focus of Nursing care to an individualized and comprehensive care, geared to physical aspects with biopsychosocial coverage. Results of these studies are important for the performance of care provided by nurses, focusing on the development of strategies pertinent to better living conditions during therapy.

The high number of diagnoses of breast cancer present in developed and developing countries and the use of chemotherapy gives rise to concern about the QoL of the women being treated. To do this, it is necessary to investigate in which aspects chemotherapy, in its adjuvant and neoadjuvant modalities, interferes in the QoL of women with breast cancer.

OBJECTIVES

- To evaluate the implications of adjuvant and neoadjuvant chemotherapy treatment on the quality of life of women with breast cancer;
- To identify changes in QoL, at different stages of chemotherapy treatment, and compare it between adjuvant and neoadjuvant steps and modalities.

METHOD

A quantitative, observational, longitudinal and analytical study carried out in a public and university institution that attends exclusively to the Unified Health System and of high complexity in the city of Curitiba, State of Paraná - Brazil, at the hematology-oncology clinic, in the period from May 2013 to May 2015.

The sample was for convenience and the inclusion criteria were: women with breast cancer, older than 18 years, who started adjuvant and neoadjuvant chemotherapy for the first time. Those who had already done any type of chemotherapy were excluded. 67 women participated in the study. Data collection was performed in three stages established by the occurrence of adverse effects. The first stage on the day the treatment was started; the second, from 40 to 50 days after the first, when the adverse effects began; and the third, from 40 to 50 days after the second, when the women were already adapted to treatment or the effects were being handled by the team (Figure 1).
Three questionnaires were used: sociodemographic and clinical characterization questionnaire, built by the researchers with data such as age, number of children, schooling, income, tobacco use, alcohol, physical activity, staging and time to start therapy, applied in the first stage; the QOL questionnaires prepared by the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire - Core 30 (EORTC QLQ-C30); and the Quality of Life Questionnaire - Breast Cancer Module (QLQ-BR23), both in Portuguese and validated in Brazil, applied in the three stages of the research.

The QLQ C-30, version 3.0, is a multidimensional questionnaire composed of thirty questions, divided into multi-item scales and simple items that evaluate different dimensions: global health status scale and quality of life (two items); functional scale (fifteen items); scale of symptoms (seven items) and scale of simple items (six items). Sixteen domains include emotional, cognitive, physical, social, role-playing, global health, quality of life, pain, fatigue, nausea and vomiting, diarrhea, constipation, insomnia, dyspnea, lack of appetite, and financial difficulties.

QLQ-BR23 is specific for women with breast cancer. It contains 23 questions divided into multi-item scales and simple items: Functional Scale, with items about body image (four items) and sexual function (two items); Scale of Symptoms, that includes items on side effects of systemic therapy (seven items), symptoms in the breast (four items) and symptoms in the arm (three items). And simple items about sexual pleasure, future prospects, and hair loss.

The EORTC questionnaires are structured to be self-answered, however, due to the low level of education of the research participants, in some cases, the questionnaire was applied by the researcher or trained interviewers. In three follow-up cases, the questionnaires were sent by e-mail and four, were done via telephone by the researcher, when it was impossible to contact the participants.
participant in the sector or due to the termination of the protocol used.

The sociodemographic data were evaluated by absolute and relative frequency and the QoL, questionnaires calculated according to the EORTC scores manual. A descriptive analysis of the collected data was performed, expressed as mean, standard deviation and minimum and maximum values. The nonparametric Friedman test was used for the comparison between the steps, complemented by the Test of Significant Minimum Differences, with a value of $p<0.05$ considered significant. For the comparison between the adjuvant and neoadjuvant modalities, the Mann Whitney test was used. The use of non-parametric tests is justified by the lack of normality of the data, as verified by the Shapiro-Wilk test.

The development of the study met the national and international norms of ethics in research involving human beings, of the National Health Council, and had approval of the Research Ethics Committee of the institution with Opinion No. 518.067 and CAAE: 00552012.4.0000.0096.

In the sociodemographic characterization of the 67 women, the mean age was 51.3 years, ranging from 30 to 77 years; 41 (61.2%) were married and 43 (64.2%) had one to three children. In relation to schooling, incomplete or complete primary education, predominated, with 29 (43.3%); 38 (56.7%) were economically active and had a family and per capita income of 2.8 and 1.1 minimum wages (R $ 788.00), respectively.

Regarding clinical characteristics, 43 (64.2%) women did not smoke; 51 (76.1%) did not drink alcohol and 50 (74.6%) did not practice any type of physical activity. With respect to the time between the time of the pathological diagnosis and the beginning of the adjuvant chemotherapy treatment, the average number of days was 73.2, with variations from 29 to 175 days, and for the beginning of the neoadjuvant therapy, the average was 57.1 days, ranging from 16 to 183 days.

The treatment data showed the EC III stage, advanced, predominant in 55 (82%) cases and the neoadjuvant chemotherapy treatment was frequent in 53 (79.1%) women, with 14 (20.9%) in the adjuvant modality. The therapeutic scheme, based on anthracyclines and taxanes, was used in 51 (77.6%) patients.

Regarding the QLQ-C30 questionnaire, collected in the three stages of the research, presented in Table 1, it was observed that the global QOL obtained variations in the mean from 74.63% to 69.13%. The emotional function presented lower averages, 50.25%, 60.73% and 63.25% in the first, second and third stages, respectively. In the symptom scale, pain was higher in the first stage, 27.86%, and fatigue presented high means in the second, 40.68%, and third stage, 40.19%.

Data from the QLQ-BR23 questionnaire (Table 1), in the three steps, showed means above 75% for body image. At symptom scales the means of breast symptoms, ranged from 33.33% to 17.90%.

RESULTS
In the comparison between the steps, the results of the QLQ-C30 questionnaire showed that physical function was compromised between the first and third stages (p < 0.001). The emotional function, between the first and the second and between the first and third stages (p < 0.05). The fatigue and nausea and vomiting symptoms were compromised between the first and second stages (p < 0.001) and between the first and third stages (p < 0.0001) and between the first and third stages (p < 0.001).

When comparing the adjuvant and neoadjuvant therapeutic modalities (Table 2), it was observed that, in the QLQ-C30 questionnaire the physical, personal and cognitive performance and the dyspnea symptom were compromised in the neoadjuvant modality, in the third stage. And the pain symptom was affected in the first stage, in neoadjuvance. Regarding the QLQ-BR23 questionnaire, the breast symptom was compromised in the third stage, in neoadjuvant therapy.

<table>
<thead>
<tr>
<th>Domains</th>
<th>1st Step n=67</th>
<th>2nd Step n=66</th>
<th>3rd Step n=61</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall quality of life</td>
<td>74.63 22.54</td>
<td>71.46 20.88</td>
<td>69.13 23.24</td>
</tr>
<tr>
<td>Functional scales QLQ-C30</td>
<td>80.60 20.69</td>
<td>76.57 19.89</td>
<td>72.46 24.45</td>
</tr>
<tr>
<td>Personal Performanc e</td>
<td>82.34 27.66</td>
<td>71.72 32.55</td>
<td>73.22 31.37</td>
</tr>
<tr>
<td>Emotional</td>
<td>50.25 32.56</td>
<td>60.73 29.34</td>
<td>63.25 27.49</td>
</tr>
<tr>
<td>Cognitive</td>
<td>77.86 28.19</td>
<td>71.72 28.49</td>
<td>72.95 29.05</td>
</tr>
<tr>
<td>Social</td>
<td>79.10 30.75</td>
<td>79.80 28.27</td>
<td>82.24 25.80</td>
</tr>
<tr>
<td>Symptom Scales / Items QLQ-C30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fatigue</td>
<td>20.65 25.91</td>
<td>40.68 31.44</td>
<td>40.19 32.61</td>
</tr>
<tr>
<td>Nausea and vomiting</td>
<td>5.72 15.23</td>
<td>25.25 21.04</td>
<td>25.07</td>
</tr>
<tr>
<td>Ache</td>
<td>27.86 31.83</td>
<td>28.79 35.51</td>
<td>29.23 32.44</td>
</tr>
<tr>
<td>Dyspnea</td>
<td>13.64 28.03</td>
<td>14.81 27.94</td>
<td>14.75 23.19</td>
</tr>
<tr>
<td>Functional scales QLQ-BR23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body image</td>
<td>83.21 21.93</td>
<td>77.02 30.63</td>
<td>75 32.77</td>
</tr>
<tr>
<td>Symptoms Scales QLQ-BR23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systemic effects</td>
<td>16.49 15.02</td>
<td>45.24 23.82</td>
<td>40.75 22.65</td>
</tr>
<tr>
<td>Symptoms of breast</td>
<td>33.33 30.12</td>
<td>23.33 23.53</td>
<td>17.90 18.25</td>
</tr>
</tbody>
</table>

5D- Standard deviation

Table 1. Descriptive data of the EORTC QLQ-C30 and QLQ-BR23 questionnaires in the three stages of the research

Table 2. Significant domains of the QLQ-C30 and QLQ-BR23 questionnaires in the comparison between the adjuvant and neoadjuvant modalities in the three stages of the research

<table>
<thead>
<tr>
<th>Domains</th>
<th>1st Step</th>
<th>U</th>
<th>p-value</th>
<th>2nd Step</th>
<th>U</th>
<th>p-value</th>
<th>3rd Step</th>
<th>U</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLQ-C30 Physical function</td>
<td>80.60 286.5</td>
<td>0.19</td>
<td>76.57 306</td>
<td>0.37</td>
<td>72.46 167.5</td>
<td>0.02*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QLQ-C30 Personal Performance</td>
<td>82.34 302.5</td>
<td>0.29</td>
<td>71.72 327.5</td>
<td>0.57</td>
<td>73.22 162.5</td>
<td>0.02*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QLQ-C30 Cognitive function</td>
<td>77.86 312.5</td>
<td>0.37</td>
<td>71.72 342</td>
<td>0.74</td>
<td>72.95 173.5</td>
<td>0.03*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QLQ-BR23 Ache</td>
<td>27.86 224</td>
<td>0.02*</td>
<td>28.79 308.5</td>
<td>0.39</td>
<td>29.23 214</td>
<td>0.18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QLQ-C30 Dyspnea</td>
<td>13.64 346.5</td>
<td>0.71</td>
<td>14.81 304</td>
<td>0.73</td>
<td>14.75 168</td>
<td>0.02*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QLQ-BR23 Symptoms of breast</td>
<td>33.33 259</td>
<td>0.09</td>
<td>23.33 315.5</td>
<td>0.51</td>
<td>17.90 134.5</td>
<td>0.003*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

U - statistically significant Mann Whitney test *
DISCUSSION

In this research, the average age of women (51.3 years) is consistent with the national average, above 50 years, although changes in the world scenario indicate an increase in young women. The study reveals that breast cancer in young people is more aggressive and has worse results. As for schooling and income, there was a low school and socioeconomic level, similar to a study in Turkey. These results demonstrate the reality of developing countries and the need for guidelines with language at the same level of understanding of the population.

Regarding the clinical characteristics, the women did not practice physical activity in more than 70% of the cases, an alert regarding the sedentary lifestyle, that is a risk factor for the development of this cancer. The practice of physical activity, as well as a protective factor promotes physical and emotional well-being for women during treatment.

In this study, locally advanced staging (ECIII) was predominant, with evidence of delayed disease detection. In a study in Africa, it was observed that longer diagnostic time results in advanced stages and with high mortality rates. Regarding the time to start treatment, more than 50% of the cases were within the recommended period.

Regarding the QoL questionnaires, women considered the overall QoL to be satisfactory, with variations in the three stages of the research, and in the comparison between the modalities there were no changes related to the type of treatment instituted, either adjuvant or neoadjuvant. Thus, regardless of the therapy, the QoL was considered good. In England, a longitudinal study, of 830 women, identified the impact of chemotherapy on QoL, averaged 58.3% during therapy to 83.3% before or after treatment, reporting treatment impact and the importance of ongoing evaluations by practitioners.

Although overall QoL remained stable, other aspects were altered during the therapeutic course, an alert to the professionals regarding the care directed in this period. Nursing, in particular, the time spent alongside women, should be attentive to factors beyond physical symptoms and manage care based on the knowledge of the psychosocial aspects affected by breast cancer and its treatments.

In the functional scales of the QLQ-C30 questionnaire, it was observed that, in the comparison between the stages, the physical function was compromised, with losses in the performance of heavy personal and physical activities. When comparing the modalities, this function was impaired in the neoadjuvant modality, possibly attributed to late diagnoses that provide aggressive treatments. In the study of Turkey, which evidenced negative changes in this domain, when evaluating the QOL of 105 patients with breast cancer in chemotherapy, it was observed that, in the advanced stages, these symptoms are more frequent than in the initial stages, although it does not stratify the therapeutic modality.

The encouragement to perform light activities and family participation in the tasks are important and effective care promoted by the nurse to maintain the independence and maintenance of the daily routine of women.

The emotional function was one of the most altered domains in all stages of this study (50.25%, 60.73%, 63.25%). In the comparison between the modalities, there were no differences between adjuvant and neoadjuvant, indications of the impact caused by the diagnosis and their treatments, regardless of mode. Studies in France, the Middle East and Turkey have shown impairments in this function, with a decrease in QOL. In another study in China with 269 women during therapy and 148 who had already completed treatment a year ago, evidences emotional changes in all women with elevated anxiety levels and impairments in physical and functional functions. The need for identified emotional support can be offered by nurses and will establish a relationship of trust and dialogue that reduces anxiety and improves the self-esteem of these women. The referral to other professionals favors the coping of the disease and helps in the emotional recovery.

In the present study, in terms of cognitive function, the means were higher than 70% in the three stages and, in the comparison between modalities, it was compromised in neoadjuvant therapy (p = 0.03), whose drugs were highly cytotoxic. Cognitive impairment can be influenced by factors such as chemotherapy and drug types, and this is one of the effects of cancer treatment that can go on for years, decreasing QOL. There are, often, effects related to memory, learning, speed processing and executive function. Keeping women and family members informed and stimulating activities involving memory can facilitate the handling of cognitive impairments.

The personal performance function in the comparison between the steps, did not present changes in daily and leisure activities. However, when comparing the modalities, it was affected in the neoadjuvant therapy,
allied to the aggressive treatments. A study in the Middle East\textsuperscript{10} presented this domain involved in women who underwent chemotherapy in relation to those who did not, but did not stratify the therapeutic modality. The woman plays the mother, the wife, the housewife and the worker, and when she falls ill, she is affected by the effects of the treatment and the impact of the disease. The assistance offered by the professionals helps them to face this moment, with management of actions that minimize the negative effects of chemotherapy.

When analyzing the QLQ-C30 symptom scale, it was observed that fatigue, and nausea and vomiting were frequent symptoms in the comparison between the stages and did not present differences between the adjuvant and neoadjuvant modalities. Fatigue was reported by women at the start of therapy, possibly related to signs and symptoms of the disease, with increase during chemotherapy. The prevalence of this domain is verified in other studies, with averages of 36.4\% and 35.28\% \textsuperscript{21} These data indicate the wide occurrence of the symptom and the need for early management since diagnosis. It is a symptom associated with the disease and does not occur in isolation. In the French study, it was identified high levels of fatigue associated with functional alterations and other symptoms.\textsuperscript{21}

Thus, the possible causes and factors that can overcome it must be observed and controlled. Energy conservation strategies are indicated for good functional performance and better QoL of patients during chemotherapy.\textsuperscript{4}

The practice of physical activities is an efficient intervention for the control of fatigue, especially in patients with breast cancer.\textsuperscript{21}

As for the pain symptom, it was possible to observe that the averages (27.86\%, 28.79\%, 29.23\%) remained stable in the three stages, and, in the comparison between modalities, this symptom was predominant for women in neoadjuvance . This fact is justified by the late diagnoses present in 82\% of the women. Pain is a frequent cancer-related symptom, and causes changes in QoL.\textsuperscript{10} A study reveals the prevalence of the symptom in 67\% of cancer patients, with inadequate management by the professionals and a high risk of reporting it at any time.\textsuperscript{24} It is a feeling that interferes in the emotional, social life and in the accomplishment of daily activities, causing limitations that exalt the symptom and impair the QoL of the women.

Dyspnea was evidenced in the comparison between the modalities in the neoadjuvant therapy, also possibly related to the advanced diagnoses. It is an infrequent symptom; its occurrence is related in patients with cancer with distant metastases, associated with other factors, such as the presence of comorbidities.\textsuperscript{20}

Regarding the QLQ-BR23 questionnaire, in the functional scale, no domain was compromised. On the symptom scale, the systemic effects of treatment increased during therapy, with women's QoL impairment. More aggressive treatments, such as chemotherapy, favor the occurrence of adverse effects, with a decrease in QoL, as observed in the cross-sectional study, in Paraguay, with 125 patients and an average of 75.7\% in this domain.\textsuperscript{26} The intensification of these effects, during therapy, interferes with the physical, psychological and in the performance of activities.\textsuperscript{3} Constant guidelines and measures to control these symptoms should be oriented to enable the physical and emotional recovery of women.

The symptoms of the breast showed differences between the stages, indicating an improvement in this symptom, with a decrease in the means (33.33\%, 23.33\%, 17.90\%). In the comparison between the modalities, there was superiority of this domain in the neoadjuvance, in view of the advanced diagnoses. These data differ from the literature, evidencing impairment in this domain in mastectomized women, in adjuvant therapy, with increased sensitivity and pain in the breasts.\textsuperscript{26} In this study, the diagnoses were late, which may make possible changes and symptoms at the tumor site.

**CONCLUSION**

In the comparison between the stages, the QLQ-C30 domains were the physical function, between the first and third stages (p <0.001); the emotional function, between the first and second phases, and between the first and third stages (p<0.05), and fatigue, and nausea and vomiting, between the first and second stages (p <0.001), and between the first and third stages (p <0.001 and p <0.01), with impairment of quality of life.

In relation to QLQ-BR23, the domains were affected, systemic effects between the first and second stages (p <0.0001) and between the first and third stages (p <0.0001) and breast symptoms, between the first and third stage (p <0.05).

As compared to the adjuvant and neoadjuvant therapeutic modalities, in QLQ-C30, domains, physical function (p = 0.02), personal performance (p = 0.02), cognitive function (p = 0.03) and dyspnea 0.02 were
compromised, in the neoadjuvant modality, in the third stage, and the pain symptom (p = 0.02) was affected, in the neoadjuvance, in the first stage. Regarding QLQ-BR23, breast symptoms (p = 0.003) were compromised, in neoadjuvant therapy, in the third stage.

Breast cancer alters the lifestyle of women, influenced by the stigmas, concerns, fear and effects of the disease and its treatments. Chemotherapy is an aggressive therapy, which provides adverse reactions and impairs the QOL of women.

QoL is a parameter that allows the evaluation of aspects compromised by breast cancer and its treatments, with viability of the professionals in these domains affected and realization of an integral and effective assistance.

Nursing with technical, scientific and human attributes, can plan actions aimed at the affected needs, aimed at recovering the living conditions of women throughout the therapeutic itinerary.

REFERENCES


English/Portuguese