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Acceptance of the illness and the quality of life of patients with breast cancer

Abstract

Introduction. Breast cancer is the most frequent cancer diagnosed in women. Its treatment is a combined therapy and the sequence and time are established according to the accepted standards in Poland. Consequences posed by this disease include disorder in the physical, mental and social spheres in women. Adapting to cancer is very important for the process of treatment, and the acceptance of the disease is the determinant.

Aim. The aim of the study was to determine and compare the degree of acceptance of the illness and the assessment of quality of life among breast cancer patients during cancer treatment.

Material and methods. The survey included 85 ill people treated in a conserving way and 94 ill people treated by breast amputation. Patients after the surgical procedure were subjected to adjuvant treatment involving chemotherapy (90 women) and/or endocrine therapy (87 women). The study used standardized questionnaires EORTC (European Organisation for Research and Treatment of Cancer): QLQC-30 and the scale (AIS Approval IIIness Scale).

Results. The highest level of acceptance of the disease, so the best ability to adapt to cancer have those women who have undergone radical mastectomy and adjuvant hormone therapy during the treatment. The lowest level of acceptance of the illness, expressed as a negative assessment was observed in women after BCT and during chemotherapy treatment. The use of the EORTC QLQC-30 to assess the overall health and quality of life of patients allowed us to capture statistically significant differences in the percentages stating good health, with the relatively highest negative response rates which were observed in the subgroups treated with chemotherapy and hormone therapy. With regard to the highest quality of life, the percentage of negative responses was observed in subgroups treated with the use of hormone therapy and after mastectomy.

Conclusions. Good acceptance of the disease was obtained by women treated for breast cancer who have undergone mastectomy in the course of adjuvant endocrine therapy. The assessment of general health and quality of life was influenced by oncological treatment. Patients during chemotherapy and hormone therapy showed a negative impact of this form of treatment on overall well-being and functioning.Patients after mastectomy and during hormone therapy treatment showed a comparatively lower quality of life compared to a group of patients after BCT and during treatment with chemotherapy.

Keywords: breast cancer, acceptance of the illness, quality of life.

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INTRODUCTION

Breast cancer is a significant health and social problem. In Poland, breast cancer is the most common cancer among women and accounts for about 22.22 % of all cancer cases [1]. Treatment of breast cancer is a combined therapy and the sequence and time are established according to the accepted standards [2].

The basic principle of therapeutic treatment in the early stages of advancement is the primary use of surgery, supplemented according to the indications with postoperative radiotherapy (RTH). The main goal of surgery is to achieve completeness of oncological and pathological data on the progress of the cancer. As a part of the surgical treatment of breast cancer breast-conserving therapy (BCT) and amputation (mastectomy) are performed [3].

Systemic treatment: chemotherapy and hormonal therapy (CHT and HTH) in combination with surgery are used in cases of advancement of the cancer.

In cases of the primary tumor generalization, systemic treatment is performed [4]. Chemotherapy in patients with metastatic breast cancer is indicated in the presence of visceral metastasis, hormone-resistant tumor or to achieve a rapid clinical improvement in selected patients with the presence of steroid receptors in tumor cells [5].

Each of the therapy methods in the breast cancer treatment has been recognized as the therapeutic value, but the possibility of side effects could be seen in each of them. The treatment is often associated with additional ailments, hospital stress, adverse changes in appearance, loss of power and helplessness [6].

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In response to physical disorders negative emotional reactions may appear, such as anxiety, depression, anger or aggression as a manifestation of mental disorders area [7,8]. The cancer involves many stressful situations with elements of biological and psychological threats. Stress experienced by cancer patients is chronic and can lead to deterioration of the dynamics of life and fitness [9].

A specific feature of cancer is its dynamic process that requires the patient's ability to cope with the ever-changing situation. The information about the disease, treatment, and other people's reactions to the disease decide how patients cope with experiences related to the disease itself. The lack of reliable information about the disease or false information, based on stereotypes, builds unsuitable emotional attitudes towards the disease and treatment. In the course of cancer, it is extremely important to accept the disease. The acceptance means the recognition of the existence of cancer and coming to terms with the current health situation by adopting living with the disease. Observation of cancer patients' capacity is important for the course of the therapeutic process, because the maintenance of functional capacity contributes to a better adaptation to the disease [10,11].

The acceptance of the disease, which is related to less severe adverse reactions and emotions associated with the disease, is an important part of the process of adapting to life with the disease. It is a process occurring on two levels – emotional and cognitive-behavioral therapy. In addition, the acceptance of illness associated with the action set to restore well-being of oneself (so-called phoenix effect), with a willingness to accept oneself as a patient is important [12].

The acceptance of the disease increases the sense of security, which reduces the severity of negative emotions and reactions associated with the disease, and a sense of discomfort. The forms of adaptation to the disease affect the well-being by increasing or decreasing the subjective assessment of the quality of life [13].

AIM

The aim of the study was to determine and compare the degree of acceptance of the disease and the assessment of quality of life among breast cancer patients during cancer treatment. The following surgical treatment was used: radical mastectomy and BCT, complementary to chemotherapy after surgery or hormone therapy.

MATERIAL AND METHODS

The study was conducted among patients at the St. John's Cancer Center in Lublin (COZL) between 2010-2013. The research, which was voluntary and anonymous, comprised 356 patients. The survey included 85 ill people treated in a conservative way and 94 ill subjects treated by breast amputation, 90 ill subjects treated by complementary chemotherapy and 87 ill subjects treated by complementary hormone therapy. The patients after the surgical procedure were subjected to adjuvant treatment involving chemotherapy (FAC, AT, AC) and/or hormone therapy, depending on the hormonal profile (tamoxifen or aromatase inhibitors in postmenopausal women).

The participants were informed about the purpose of the study and how to fill out questionnaires.The tests were conducted after approval of the Bioethics Committee of the Medical University of Lublin. A questionnaire was used which included, inter alia socio-demographic data, standardized questionnaires: the EORTC-QLQ-C30 (version 3.0) (European Organization for Research and Treatment of Cancer Core Questionnaire) [14].

AIS scale was constructed by B.J. Felton, T.A. Revensson and G.A. Hinrichsen of the Center for Community Research and Action, Department of Psychology, New York University in 1984. For the Polish conditions it was adapted by Juczyński and made available with the permission of the author [15].

AIS scale contains eight statements describing the consequences of ill-health in the assessment of the limitations caused by illness, lack of self sufficiency, a sense of dependence on others and a sense of dependence on others.

For each question, respondents defined the current state of their health based on five-point scale by selecting the appropriate number from 1 – strongly disagree, 2 – disagree, 3 – I do not know, 4 – I disagree to 5 – strongly disagree.

A general measure of the degree of disease acceptance was the score from 8 to 40. The lowest score of 8 points marked the lack of acceptance of the disease and adaptation to the disease, while the score of 40 points implies full acceptance of adaptation to the disease and is manifested by the absence of negative emotions associated with the disease [15]. For the test, the questions about general health (global health status) were taken out from the EORTC QLQ C-30. The general health scale consisted of two questions. For either question, one out of seven possible answers was chosen.

Responses obtained from patients were subjected to statistical analysis. For the description of the study group with respect to a continuous variable (e.g. age), descriptive statistics module Stat Soft Statistica v. 7.1 was used. Characteristics of the research group was conducted on the basis of basic demographic data. The analysis was described depending on the distribution ratio or the average value and the range of percentiles or standard deviation. With regard to inter-group differences, tests of nonparametric statistics module were used, respectively U Mann-Whithey and Kolmogorov-Smirnov tests. In order to know the difference in the preference of each subpopulation McNemary test was used. Calculations were done for CI = confidence interval of 95% and therefore significantly statistical differences were considered for which satisfies the condition of the p value ($p<0.05$).

Test results

The study included 356 women aged 28-81 years. Marital status of women surveyed was as follows: a relatively large number of respondents were married –74.8%, widows – 12.9%, 7.8% – unmarried women and 4.5% – single. Studies have shown that most patients had secondary education – 119 people, i.e. 33.4 %, 113 people had higher education – 31.8%. The place of residence for the majority of women surveyed is a city – declared by 48.3% of women. Moreover, less than 28.9% of the respondents indicated that their place of residence is the village. The vast majority of respondents were active – 89.6 % of the respondents. The detailed data is presented in Table 1.

TABLE 1. The demographic and social characteristic of the study group.

Feature	Study group after mastectomy N=94	Study group after BCT N=85	Study group after adjuvant chemotherapy N=90	Study group after hormone therapy N=87	Statistical significance p
Age	38-79 Me=62 year	28-77 Me=59 year	29-68 Me=52 year	38-81 Me=61 year	p=0.3993
Marital status					
Married	72 (76%)	65 (76%)	70 (78%)	59 (68%)	p=0.2944
Single	2 (2%)	5 (6%)	3 (30%)	6 (14%)	p=0.2889
Divorced	8 (9%)	5 (6%)	9 (10%)	6 (14%)	p=0.4227
Widow	12 (13%)	10 (12%)	8 (12%)	16 (18%)	p=0.1531
Place of residence					
Country	31(33%)	24 (28%)	25 (28%)	23(26%)	p=0.3408
Town<50,000	22 (23%)	23 (27%)	17 (19%)	19 (22%)	p=0.4292
City>50,000	41 (44%)	38 (45%)	48 (53%)	45 (52%)	p=0.3318
Education					
Primary	12 (13%)	8 (94%)	15 (16%)	7(80%)	p=0.1356
Vocational	24 (25%)	22 (26%)	18 (20%)	28 (32%)	p=0.1845
Secondary	28 (30%)	30 (35%)	36 (40%)	25 (29%)	p=0.2004
Higher	30 (32%)	25 (30%)	31 (34%)	27 (31%)	p=0.5040
Professional activity					
Employed	55 (58%)	50 (59%)	51 (57%)	58 (67%)	p=0.5006
Pensioner, Retired	39 (41%)	35 (41%)	39 (43%)	29 (33%)	p=0.2751
Coexisting diseases					
Yes	73 (78%)	65 (76%)	82 (91%)	74 (85%)	p=0.1870
No	21 (22%)	20 (23%)	18 (20%)	13 (15%)	p=0.2300

The basis for assessing the degree of acceptance of the disease, as well as psychological discomfort, were the results of tests obtained by a questionnaire AIS.

The sum of all points scored, being a measure of the degree of acceptance of the disease in the study group, ranged from 8 to 40 points. Questions based on AIS scale were grouped as negative and positive assessment. The percentage of positive feelings was higher in hormone therapy after mastectomy and compared with a history of BCT tested and chemotherapy.

The distribution of responses in subgroups is shown in Figure 1. The biggest problem with the acceptance of the disease is the dependence on third parties. Patients suffering from the disease feel that the disease reduced the performance of activities, which were a pleasure before the disease.

The analysis using the EORTC QLQC-30 rating of overall health of patients (Figure 2) allows you to capture statistically significant differences in the percentages of the responses stated in good health, with the relatively highest negative response rates that were observed in the subgroups treated by using chemotherapy and hormonal therapy respectively 61% and 58.7%. The results were significantly different with respect to the corresponding response in subgroups after mastectomy and BCT, respectively 35.7% and 43.5% (PU=95%).

The analysis using the EORTC QLQC-30 quality of life assessment of patients (Figure 3) allowed us to capture statistically significant differences in the percentages stating in the answers a good level of quality of life, with the relatively highest negative response rates observed in the subgroups

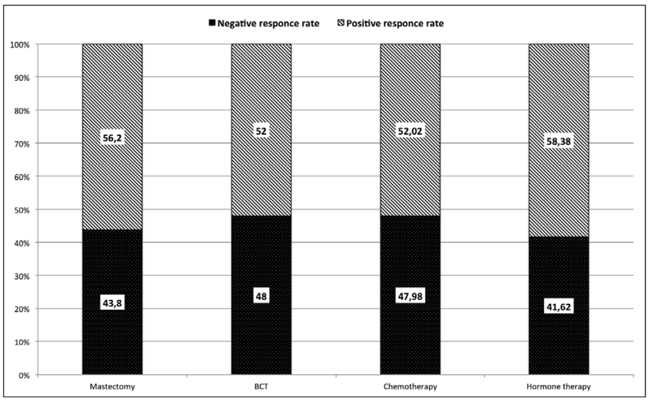

FIGURE 1. Results of rating the acceptance of the disease in the study group using AIS scale.

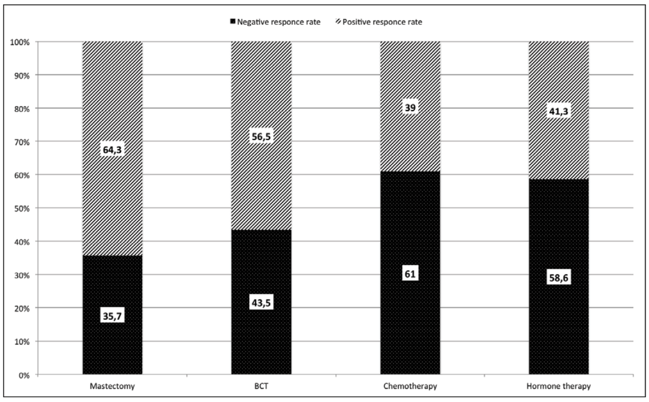

FIGURE 2. Results of rating the global health of patients using EORTC QLQC-30 questionnaire with regard to type of prior treatment.

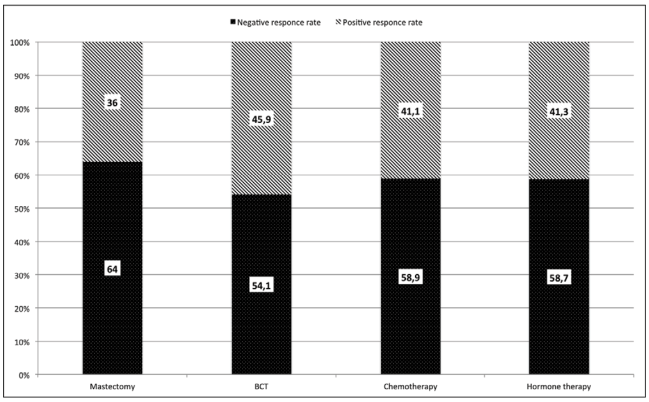

FIGURE 3. Results of rating quality of life of patients using the EORTC QLQC-30 questionnaire with regard to type of prior treatment.

treated with the use of hormone therapy and after mastectomy, respectively 58.7% and 64%. The results were significantly different with respect to the corresponding response in subgroups after chemotherapy 41.1% (PU=95%).

DISCUSSION

More recently, an important determinant of treatment in addition to overall survival is the assessment of the quality of life (Quality of Life). Quality of life is the focus of both daily practice and clinical trials [16].

Adapting to cancer expressed in the acceptance and application of constructive coping strategies is important not only for the current state of health, but also for more distant health consequences [17].

People affected by cancer show a variety of ways of responding to the disease. The author of numerous scientific papers prof. Christine De Walden Gałuszko says that everyone produces their own subtle constellation of cognitive, emotional reactions and stereotype behavior. This kind of behavior is relatively permanent and patients use it at different stages of the disease [18].

Research suggests that the greater the degree of acceptance of the disease, the better adaptation and less discomfort caused by the disease, the smaller the stress caused by disease, a sense of self-worthiness is retained. Other studies say that the higher the level of acceptance of the disease, the lower the anxiety behavior, and less sense of helplessness and hopelessness [18,19].

Patients with breast cancer are difficult to reconcile with the loss of independence and a sense of self-sufficiency. Patients also feel that the disease either reduced or took away their source of pleasure, limited their role in family, social and professional life. The specificity of the disease, diagnosis and treatment greatly affect the quality of life. The study shows that the quality of life of women after mastectomy changes, although these changes are not radical.

The disease, its treatment and side effects may be the cause of reduced quality of life. In this paper, we analyzed whether the type of cancer treatment had an impact on the assessment of the quality of life of women treated for breast cancer. Our findings confirm the widespread opinion that breast-conservative treatment is associated with a higher quality of life assessment and forecast of their own health. Other studies show higher assessment of their appearance and better health prognosis in the group of patients after BCT [20,21].

The image of own body is the foundation of a sense of personal value, while the loss of the breast is associated with disfigurement, loss of a symbol of femininity, attractiveness and motherhood. Another factor influencing the better perception of body image is whether the treatment was conservative or amputating breast [22].

In the women who underwent mastectomy, physical changes were accompanied by adverse changes in the psyche. Women feel worthless. They were diagnosed with incomplete values syndrome, described as the half-female complex [23].

The scope of the research presented in this paper does not cover in full all aspects of life and at the same time does not fully reflect the objective assessment of its quality.

It only allows for subjective analysis of the assessment of the health situation of oncological patients treated for breast cancer.

It is extremely important because it is an individual assessment made by the patients themselves. Measurement of quality of life should be systematically analyzed and be an integral part of the treatment and rehabilitation process.

CONCLUSIONS

1. A good acceptance of the disease was showed by ill patients treated for breast cancer after mastectomy and adjuvant hormone therapy during treatment. The lower level of acceptance of the disease was observed in women after BCT and during treatment with chemotherapy.
2. Obtained results using EORTC questionnaires showed that the assessment of general health was affected by the treatment. The patients during chemotherapy and hormone therapy showed a negative impact of this form of treatment on overall well-being and functioning.
3. Obtained results indicate a good quality of life among patients after BCT and during treatment with chemotherapy, which confirms the benefits of breast conservation.

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