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Evaluation of health-related quality of life in patients with breast cancer

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Key words: *breast cancer; quality of life; Lithuania.*

Summary. *Background. Breast cancer is the most common cancer among women, comprising about 23% of all cancer types. About 1300 new cases of breast cancer are registered in Lithuania annually. During the last decade, health-related quality of life has become an important part of breast cancer treatment. Pain, fatigue, and sleep disorders are important aspects of health-related quality of life.*

The aim of the study was to evaluate health-related quality of life (HRQL) among patients with breast cancer in Lithuania. The main tasks were to analyze HRQL in sociodemographic and clinical aspects, and to determine symptoms that have the greatest impact on HRQL .

Material and methods. A cross-sectional study was carried out in four major Lithuanian hospitals. An EORTC QLQ-C30 (version 3) questionnaire with general demographic and medical information was distributed among 318 patients. A total of 284 patients were included in the analysis.

Results. The response rate was 89%. The mean age of patients was 55.9 years (SD, 10.1 years), and the mean time from diagnosis – 2.36 years (SD, 3.2 years). A greater part (65%) of the studied women lived in a family or with a partner. Women reported high level of functioning across several standardized HRQOL scales: cognitive functioning, everyday activity, and physical functioning. Fatigue and sleeping disorders were the most commonly indicated symptoms in the symptom scale. Fatigue and pain were the most important factors affecting general HRQOL.

Conclusions. Our results emphasize that the general HRQOL of the studied women is fair, but poorer than that of the corresponding population in other countries. Women living in a family or partnership experienced fewer financial troubles and had higher HRQOL scores across several standardized measures compared to those who were single. Women with late stages of breast cancer felt worse and were less socially active compared to women who were diagnosed with early-stage breast cancer.

Introduction

Breast cancer is the most common malignant disorder among women, comprising approximately 23% of all forms of cancer. According to the WHO, more than 1 million new cases of cancer are annually diagnosed worldwide. The mean prevalence of breast cancer in the world is about 66.7 cases per 100 000 women. The highest morbidity is registered in the developed countries, especially in the United States, whereas in Asian and African countries, it is the lowest. Approximately 350 000 new cases of breast cancer are registered in Europe annually. The respective number in Lithuania is nearly 1300 cases (1, 2). Mortality from breast cancer in Lithuania reaches approximately 32 cases per 100 000 population.

The diagnosis of breast cancer is based on the results of clinical, radiological, and patho-morpho-logical examinations. In the developed countries, breast cancer is treated using evidence-based recommendatory treatment schemes. Treatment plan is individually devised for each patient with respect to the clinical manifestations, the extent of the process, and the morphology of the tumor. The main information that affects treatment strategy is the expression of estrogen, progesterone, and HER2 receptors, and the risk for the progression of the disease (3).

At present, there are around 3.7 million women worldwide with cancer diagnosed earlier than 5 years before (4). The survival indices for breast cancer patients have been steadily improving for more than 20 years. The Institute of Cancer Research (UK) has prognosticated that more than two-thirds of women with recently diagnosed breast cancer are expected to survive for at least 20 years (5).

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In the developed countries, stage I breast cancer is diagnosed most commonly. For a long time, the following trends predominated in Lithuania: in nearly 60% of patients, breast cancer was diagnosed in the early stage, and in nearly 40% of women – in the late stage (6). The initiation of the mammography screening program is expected to result in an increased number of cases of early-stage cancer and, consequently, a drop in death rates. According to the data of the Lithuanian Cancer Registry, in 1995, the number of identified cases of stage I and II breast cancer was very similar to that of stage III and IV cancer – 591 and 477, respectively – while during 1995–2007, the number of cases of stage I–II breast cancer increased from 591 to 935.

The early mammography screening program and modern early diagnostics and treatment techniques increase the patients' life expectancy and improve survival indices. This conditions increased interest in possible treatment outcomes and quality of life of patients with breast cancer. Ensuring the patients' well-being has become one of the aims of treatment, and the evaluation of the quality of life – one of the instruments for the evaluation of the efficiency of the modern cancer therapy.

The search for literature sources for 2003–2008 on various aspects of the quality of life among patients with breast cancer in the electronic database "Medline" showed that the majority of studies on the quality of life focused on the manifestation of symptoms (193 publications); other authors analyzed other aspects of the quality of life, e.g. those related to surgical treatment (15 publications), systemic chemotherapy (24 publications), hormone therapy (22 publications), or the patients' age (25 publications).

The global tendencies of increasing numbers of scientific publications indicate that during the last decade, the quality of life has become an important aspect of cancer therapy (7, 8). The quality of life is a multifaceted concept that is determined by clinical, sociodemographic, and psychological factors. Specific symptoms of cancer, such as pain, fatigue, and sleep disorders are especially important for the patients' quality of life. It is thus important to analyze this aspect of symptom manifestations in order to attract the attention of clinical specialists (9).

The aim of this study was to evaluate the quality of life in Lithuanian patients with breast cancer. The main objectives of this study were the following: to analyze the quality of life among patients with breast cancer through the prism of different sociodemographic and clinical factors; and to identify symptoms that have the greatest effect on the quality of life.

Material and methods

This cross-sectional study was a part of research on breast cancer health economics performed in 2008 and aimed at evaluating the direct and indirect expenditures of the Budget of the Compulsory Health Insurance Fund (CHIF) and patients with breast cancer. Using data of the Lithuanian Cancer Registry for 2005 on the number of breast cancer patients in Lithuania (10 178 women) and data of the Department of Statistics to the Government of the Republic of Lithuania on the number of population (1 821 900 women), we calculated that the prevalence of breast cancer in Lithuania was 0.56. Using these figures, it was calculated that the sample size that would represent female inhabitants of Lithuania would be 379 subjects. During the study, data on quality of life of breast cancer patients were collected in four healthcare institutions of Lithuania that provided services of breast cancer treatment: the Hospital of Kaunas University of Medicine, Oncology Hospital of Kaunas University of Medicine, Šiauliai County Hospital, and Klaipėda University Hospital. Data presented in this article were collected from October 2008 to March 2009. The contingent of the study consisted of patients who applied to the aforementioned healthcare institutions during the period from October 2008 to March 2009 and in whom the duration of the disease exceeded 6 months. Women who underwent inpatient or outpatient (chemotherapy) treatment at these institutions or who visited specialists for outpatient consultations were asked to fill in written questionnaires during their visits. The inquiry was carried out by the authors of the study and physicians and nurses of the departments at the aforementioned healthcare institutions. The quality of life of breast cancer patients was evaluated using the overall quality-of-life questionnaire, EORTC QLQ-C30 (version 3).

Bibliographic survey of literature for 1974–2007 showed that one of the most commonly used and best developed instruments for the investigation of patients with breast cancer was the EORTC QLQ-C30 questionnaire developed by the European Organization for Research and Treatment of Cancer (EORTC) (10). This questionnaire was selected for the following reasons:

1) economic evaluation of breast cancer required a questionnaire whose data analysis would allow for the calculation of the obtained values in quality-adjusted life years (QALY);

2) permission to use the Lithuanian version of the EORTC QLQ-C30 questionnaire could be obtained from its authors.

The EORTC QLQ-C30 questionnaire is an internationally validated instrument for the evaluation of the quality of life suitable for the investigation of cancer patients. This questionnaire has been translated into a number of languages and is characterized by excellent psychometric properties. This specialized system consists of 5 functional scales (physical, role, cognitive, emotional, and social), 3 symptom scales (fatigue, pain, and nausea and vomiting),

6 single-item measures (dyspnea, insomnia, loss of appetite, constipation, diarrhea, and financial troubles), and a global health and quality-of-life scale (11). The questionnaire includes demographic, clinical, and socioeconomic characteristics. Data analysis was performed using EORTC guidelines – the scores were transformed into a linear scale ranging from 0 to 100, where higher score reflected greater expression of the studied aspect (12).

Statistical analysis. Data analysis was performed using the statistical software package SPSS 16.0. The descriptive statistics technique was used for the description of clinical, socioeconomic, and demographic variables such as age, place of residence, date of the diagnosis of breast cancer, stage of the disease, marital status, education level, and employment. All the groups of qualitative data were verified using the Kolmogorov-Smirnov test in order to evaluate the distribution of the analyzed data and to determine which statistical analysis methods should be applied.

When analyzing data collected using the QLQ-C30 questionnaire, some authors recommend that in the evaluations of overall quality of life and functional scale, the threshold value attributed to the problematic group should be set at 33 points and below, while in the symptom scale such threshold value should be at 66 points and above (12). Meanwhile, Koller et al. suggest that in clinical studies, the threshold value should be set at 50 points when evaluating the quality of life according to the worsening of the condition (13). We calculated mean scores of the quality of life in each scale and identified "problematic groups" based on Koller's recommendations – we found numerous recent publications where scale evaluations were performed by applying such technique.

When evaluating and searching for statistically significant differences in the quality of life between two independent groups of findings (personal and demographic factors: inhabitants of urban and rural areas, early and late stages of the disease, and single patients and those living in a family), we calculated mean values for each group and applied Mann-Whitney-Wilcoxon *U* test for quantitative nonparametric data.

When comparing and searching for statistically significant differences among three groups of subjects with different durations of the disease, we applied Kruskal-Wallis test for quantitative nonparametric data.

When evaluating relationships between the symptoms and the results of the functional scale and searching for associations between the symptoms and the quality of life, we applied correlation analysis of nonparametric data and calculated Spearman's correlation coefficient.

The differences were considered significant when *P* value was <0.05.

Results

A total of 318 women who filled in the overall quality-of-life questionnaire participated in the anonymous questionnaire-based inquiry; 30 women refused to participate, and 4 questionnaires were filled in incorrectly. Thus, in total, 284 questionnaires were analyzed. The response rate was 89%. The statistical Kolmogorov-Smirnov test was applied to all the studied characteristics, and the analysis showed that the difference between the distribution of the analyzed data and the normal distribution was not statistically significant (*P*>0.05), i.e. the Gaussian distribution was normal, and the mean values of the analyzed characteristics were described accurately.

Table 1 presents the social and demographic characteristics of the subjects. The subjects' mean age was 55.9 (SD, 10.1) years, and the mean duration of the period between the initial diagnosis and the inquiry – 2.36 (SD, 3.2) years. The majority (217 or 76.4%) of the subjects indicated that they lived in the city. The distribution of the patients according to the diagnosed stages of breast cancer showed that the majority of the subjects had stage II breast cancer (119 or 45.9%), and the fewest number of subjects had stage 0 (13 or 4.6%) and stage IV (12 or 4.2%) breast cancer. A greater part of the subjects lived in families or with partners (65%), and approximately 60% of them had acquired secondary or further education levels.

Table 2 presents scores of the functional and the symptom scales. In the functional scale, patients with breast cancer presented the best evaluations of the cognitive function, the role function, and the physical function aspects (the respective mean scores were 70, 65, and 63 points), while the evaluations of the emotional function and the general health condition were poorer (the respective mean scores were 56 and 57 points). In the symptom scale, fatigue and insomnia were the most pronounced symptoms (51 points each), and the mean evaluation of the financial trouble aspect was 58 points.

We identified problematic groups of patients and found that one-third of the subject complained of emotional function disorders and one-fifth of the subjects experienced problems of physical, role, and social functions (24.3%, 22.5%, and 26.1%, respectively). One-fifth (20%) of the subjects indicated that their quality of life was unsatisfactory. In the symptom scale, nearly half of the subjects identified fatigue and insomnia as causing problems (46.8% and 44.7%, respectively), while one-third of the patients (38.4%) evaluated pain by more than 50

Table 1. Sociodemographic characteristics of the subjects (N=284)

Characteristic	Distribution of subjects N (%)	Mean	Standard deviation	Number of responders
Age		55.9	10.1	284
Age groups:				
<40 years	11 (3.8)			
40–49 years	79 (27.7)			
50–59 years	92 (32.4)			
60–69 years	72 (25.3)			
>70 years	30 (10.8)			
Place of residence:				284
city	217 (76.4)			
countryside	67 (23.6)			
Time from the primary diagnosis to the study		2.36	3.23	281
Duration of the diagnosed disease:				281
<2 years	143 (50.4)			
2–5 years	111 (39.1)			
>5 years	27 (9.5)			
Stage:				259
0	13 (4.6)			
I	72 (25.4)			
II	119 (41.9)			
III	43 (15.1)			
IV	12 (4.2)			
Marital status:				284
married or lives in partnership	185 (65.1)			
single, widowed, or divorced	99 (34.9)			
Education level:				284
primary or comprehensive	22 (7.7)			
secondary or further,	175 (61.6)			
not completed higher or higher	87 (30.6)			
Occupation:				279
employed	115 (40.5)			
unemployed or a housewife	35 (12.3)			
retired	84 (29.6)			
unemployed due to illness	45 (15.8)			

points. More than half of the subjects (53.5%) indicated that they experienced financial troubles.

While analyzing the differences in the quality of life between urban and rural population, the mean scores of the quality-of-life parameters were evaluated. Statistical analysis using Mann-Whitney test showed no statistically significant differences between the two groups in either of the analyzed categories.

While analyzing the quality of life according to different clinical parameters, we compared mean values of the characteristics between different stages of the disease. In the functional scale we found that women with early-stage breast cancer demonstrated better general health status and better physical, emotional, cognitive, and social functions than those with breast cancer in its later stages (Table 3). However, statistically significant differences between the

two analyzed groups were considerably fewer, i.e. differences in the general health status (60.22 vs. 47.78), physical functions (66.21 vs. 52.20), role functions (68.66 vs. 51.11), and social functions (65.51 vs. 41.84) were significant. In the symptom scale, more pronounced symptoms in all categories were found in women with later-stage breast cancer. Although mean scores showed that women with later-stage breast cancer also experienced greater financial troubles, we did not find any statistically significant differences between the two groups in these categories.

We compared differences in the quality of life between women with different durations of the disease. The duration of the disease was evaluated as time from the diagnosis to the inquiry. Three groups of subjects were differentiated: women in whom breast cancer was diagnosed less than 2 years

Table 2. Total quality-of-life scores in the QLQ-C30 questionnaire (N=284)

Characteristic	Mean	Problematic cases %	Standard deviation	Number of responders
Score <50 points				
General health condition	57.29	19.7	20.18	272
Functional scale				271
Physical functions	62.51	24.3	22.29	251
Role functions	65.34	22.5	29.27	264
Emotional functions	56.15	32.7	28.56	261
Cognitive functions	69.60	15.8	27.27	259
Social functions	61.26	26.1	30.93	
Score ⩾50 points				
Symptom scale			26.23	268
Fatigue	50.68	46.8	26.30	252
Nausea and vomiting	17.00	13.0	30.34	258
Pain	39.99	38.4	30.23	255
Dyspnea	23.53	18.3	32.76	258
Insomnia	51.03	44.7	32.30	249
Loss of appetite	28.51	22.9	32.65	257
Constipation	26.98	21.5	23.15	244
Diarrhea	9.97	6.7		
Financial troubles	58.43	53.5	35.47	259

Values are means.

Table 3. Quality-of-life scores in separate groups (in the early and the late stages of cancer) according to QLQ–C30 (N=284)

Characteristic	Stages 0-I-II	Stages III-IV	*P* value
General health condition	60.22	47.78	<0.001
Functional scale	66.21	52.20	<0.001
Physical functions	68.66	51.11	0.001
Role functions	57.24	53.35	0.413
Emotional functions	71.96	64.23	0.170
Cognitive functions	65.51	41.84	<0.001
Social functions			
Symptom scale			
Fatigue	48.05	57.59	0.028
Nausea and vomiting	17.57	19.50	0.549
Pain	37.43	50.35	0.007
Dyspnea	21.03	33.33	0.049
Insomnia	47.80	54.86	0.189
Loss of appetite	25.60	35.59	0.042
Constipation	24.91	31.94	0.243
Diarrhea	8.57	13.50	0.183
Financial troubles	56.38	65.99	0.058

Values are means.

before the study, those in whom breast cancer was diagnosed 2–5 years before the study, and those in whom the duration of the disease exceeded 5 years. We calculated mean values and compared them using Kruskal-Wallis statistical technique. However, the analysis yielded no statistically significant differences in the quality of life among these groups.

The analysis of the mean scores of the parameters of the quality of life showed that women who were married or lived with a partner demonstrated better

general health status (Table 4). Mean scores of all scales in these women reflected better well-being, milder symptoms, and fewer financial troubles. Statistically significant differences, however, were fewer: women who lived in partnership presented better evaluations of physical functions (66.06 vs. 55.72, $P<0.01$), reported fewer cases of dyspnea (19.72 vs. 31.01, $P=0.004$), and had fewer financial troubles (54 vs. 67.07, $P=0.004$).

The search for associations between the symp-

Table 4. Quality-of-life scores in separate groups (in women living in a family and living alone) according to QLQ-C30 (N=284)

Characteristic	Living in a family or with a partner	Single, divorced, or widowed	*P* value
General health condition	59.08	53.85	0.190
Functional scale			
Physical functions	66.06	55.72	**<0.01***
Role functions	67.78	60.73	0.075
Emotional functions	57.61	53.36	0.343
Cognitive functions	71.18	66.67	0.244
Social functions	63.35	57.20	0.215
Symptom scale			
Fatigue	48.58	54.71	0.053
Nausea and vomiting	17.17	16.67	0.837
Pain	38.33	43.18	0.173
Dyspnea	19.72	31.01	**0.004***
Insomnia	49.61	53.79	0.338
Loss of appetite	27.20	31.01	0.308
Constipation	24.55	31.48	0.253
Diarrhea	8.23	13.18	0.122
Financial troubles	54.00	67.07	**0.004***

Values are means.
*The difference in mean values between the groups was statistically significant, *P*<0.05.

Table 5. The relationship between symptoms and functional scale scores according to QLQ-C30 (correlation analysis, N=284)

Characteristic	Overall quality of life	Physical functions	Role functions	Emotional functions	Social functions	Cognitive functions
Fatigue	−0.480**	−0.666**	−0.591**	−0.593**	−0.588**	−0.486**
Nausea and vomiting	−0.254**	−0.321**	−0.446**	−0.420**	−0.381**	−0.289**
Pain	−0.485**	−0.658**	−0.576**	−0.547**	−0.541**	−0.533**
Dyspnea	−0.221**	−0.461**	−0.256**	−0.313**	−0.305**	−0.193**
Insomnia	−0.366**	−0.454**	−0.345**	−0.506**	−0.459**	−0.285**
Loss of appetite	−0.360**	−0.358**	−0.399**	−0.413**	−0.400**	−0.334**
Constipation	−0.154*	−0.263**	−0.240**	−0.287**	−0.312**	−0.184**
Diarrhea	−0.07	−0.224**	−0.210**	−0.243**	−0.238**	−0.175**
Financial troubles	−0.343**	−0.350**	−0.356**	−0.242**	−0.336**	−0.469**

*The relationship was statistically significant, *P*<0.05.
**The relationship was statistically significant, *P*<0.01.

toms and the functional scale categories showed that severely expressed symptoms reflected lower functional scale scores (Table 5). Fatigue and pain had the greatest influence on the overall quality of life and all other functional scale parameters. The strongest associations were found between pain, fatigue, and all categories of the quality of life. The weakest relationship appeared to be between dyspnea, constipation, diarrhea, and all functional scale parameters.

Discussion

Confirmed diagnosis of breast cancer and the therapeutic process may significantly affect each person's psychological, physical, and emotional state. To our knowledge, so far there has been one study on breast cancer patients' quality of life in Lithuania (14). There have been no population-based studies on breast cancer patients' quality of life in our country. We believe that our study will be the first study of such scope in Lithuania.

Despite the generally high response rate, the rate of responses to individual questions was significantly lower. Questions about clinical parameters were especially problematic (e.g. the extent of the metastases or the treatment methods applied); the patients either did not answer these questions at all or the answers were incorrect, and therefore, we excluded these responses from the analysis. One can presume that the patients were not sufficiently informed about their health condition or they did not fully understand the provided information. Objective evaluation of the quality of life in clinical aspects would require collecting the data on the applied treatment

methods, the progression of the disease, etc. from medical records or the State Patients' Fund.

Our findings showed that quality of life in patients with breast cancer in Lithuania was fair (mean score, 57.29; SD, 20.18). Comparison of similar studies on the quality of life performed in other countries with our study showed that health-related quality-of-life scores evaluated using the same instrument in foreign countries were higher than those in Lithuania, e.g. a population study performed in Germany showed that the mean quality-of-life score was 65.3 (SD, 22.0); the respective score in the United States was 71.40 (SD, 20.4), and in South Korea – 66.4 (15–17).

Patients with breast cancer in Southern Germany fell into smaller "problem groups," compared to Lithuanian subjects (16). In our study, in all functional and symptom scales there were more subject distribution parts with higher or lower than the average scores (<50 points in the functional scale, and ⩾50 points in the symptom scale), compared to subjects from Southern Germany.

The analysis of the effect of disease duration on the patients' quality of life showed that the results of the published studies were contradictory: Bottomley et al. and Engel et al. stated that the subjects' quality of life worsened with increasing time from the diagnosis to the study (18, 19), while according to Waldmann et al. and our findings, this factor had no statistically significant (⩾10-point difference) effect (20).

Peuckmann et al. investigated quality of life in breast cancer patients in Denmark and found that quality of life of patients who lived alone was poorer comparing to that of patients who lived in families (21). Such conclusion was corroborated by our results as well those obtained in other studies (22, 23).

Two groups of researchers published findings on the differences in quality-of-life parameters between patients' groups with different stages of breast cancer (17, 24). We also found that functional scale scores were lower in patients with later-stage breast cancer as compared to those in patients with early-stage disease. Statistically significant differences between these groups were found in the categories of general health status, physical functions, role functions, and social functions. Janz et al. investigated the effect of symptoms on quality of life of patients with breast cancer and found that sleep disorders were an important factor that affected the overall quality of life in later stages of breast cancer (23). Contrary to these results, a study performed in Taiwan found no statistically significant differences between different clinical stages of breast cancer with respect to their effect on the quality of life (25).

Authors of numerous published studies confirmed that pain and fatigue were the most important factors that affected quality of life of patients with breast cancer (16, 17, 24–26). Our results also corroborated these findings with respect to Lithuanian patients: statistical correlation analysis showed that the strongest associations between symptoms and the overall quality of life were found for pain and fatigue variables (Spearman's correlation, $P<0.01$). Since fatigue and pain are related to physical, emotional, and psychological sequelae of the disease, a closer patient-physician dialogue should be developed in order to evaluate the effect of the applied therapy on these symptoms. Light physical exercise, sleep hygiene, and attention- and memory-stimulating exercises might reduce the severity of fatigue in cancer patients (27, 28). It has been proven that patients who overcame fatigue demonstrated better overall quality of life and better possibilities for participation in daily activities (29).

Conclusions

The quality of life among women with breast cancer in Lithuania was found to be fair, but poorer compared to that in the respective population in other countries.

The subjects who lived in families or in partnership experienced fewer financial troubles and demonstrated better physical functions as compared to the single ones.

Pain and fatigue were the major factors that affected the subjects' quality of life.

Women with later-stage breast cancer demonstrated poorer condition and were less socially active as compared to women diagnosed with early-stage breast cancer.

Sergančiųjų krūties vėžiu gyvenimo kokybės vertinimas

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Raktažodžiai: krūties vėžys, gyvenimo kokybė, Lietuva.

Santrauka. *Įvadas.* Krūties vėžys yra dažniausiai paplitusi moterų onkologinė liga, sudaranti apie 23 proc. visų vėžio formų. Lietuvoje kasmet užregistruojama apie 1300 naujų krūties vėžio atvejų. Per pastarąjį

dešimtmetį gyvenimo kokybė yra tapusi svarbia vėžio gydymo dalimi. Specifiniai vėžio simptomai, tokie kaip skausmas, nuovargis ir miego sutrikimai turi ypatingos svarbos sergančiųjų gyvenimo kokybei, todėl svarbu išanalizuoti šį simptomų pasireiškimo aspektą, siekiant atkreipti klinikinėje praktikoje dirbančių specialistų dėmesį.

Tyrimo tikslas ir uždaviniai. Tyrimo tikslas – įvertinti Lietuvos gyventojų, sergančių krūties vėžiu, gyvenimo kokybę. Pagrindiniai tyrimo uždaviniai: išanalizuoti sergančiųjų krūties vėžiu gyvenimo kokybę per skirtingų sociodemografinių ir klinikinių faktorių prizmę, nustatyti simptomus, turinčius didžiausios įtakos gyvenimo kokybei.

Tyrimo medžiaga ir metodai. Siekiant įvertinti sergančiųjų krūties vėžiu gyvenimo kokybę Lietuvoje, 2008 m. spalio – 2009 m. kovo mėn. atliktas vienmomentinis tyrimas keturiose Lietuvos gydymo įstaigose. Tiriamosios buvo apklaustos raštu naudojant bendrąjį gyvenimo kokybės klausimyną EORTC QLQ–C30 (3 versija). Anoniminėje anketinėje apklausoje dalyvavo 318 moterų, analizuoti 284 klausimynai.

Rezultatai. Fiksuotas atsako dažnis – 89 proc. Vidutinis tiriamųjų amžius – 55,9 metų (±10,1), vidutinis laikotarpis nuo pirminės diagnozės nustatymo pradžios – 2,36 metų (±3,2 metų). Didesnė dalis sergančiųjų gyvena šeimoje arba su partneriu (65 proc.). Moterys funkcinėje skalėje geriausiai įvertino pažinimo funkcijos, kasdienės veiklos bei fizinės funkcijos aspektus. Simptomų skalėje nuovargis ir nemiga buvo stipriausiai pasireiškiantys simptomai. Nuovargis ir skausmas turėjo didžiausią įtaką gyvenimo kokybei bei visiems kitiems funkcinės skalės parametrams.

Išvados. Tirtų Lietuvos moterų, sergančių krūties vėžiu, gyvenimo kokybė yra vidutinė, bet žemesnė nei kitų šalių atitinkamos populiacijos. Tiriamosios, gyvenančios šeimoje arba su partneriu, patiria mažesnių finansinių sunkumų, turi geriau išreikštas fizines funkcijas nei vienišos. Moterys, sergančios vėlyvųjų stadijų krūties vėžiu, jaučiasi blogiau, jos yra mažiau socialiai aktyvios lyginant su moterimis, kurioms diagnozuotas ankstyvųjų stadijų vėžys.

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