



QUALITY OF LIFE IN RELATION TO SOCIAL SUPPORT AND BODY IMAGE IN WOMEN WITH BREAST CANCER AFTER MASTECTOMY

GORKA VULETIĆ^{1,2}

¹Department of Psychology, Faculty of Humanities and Social Sciences in Osijek,
University J. J. Strossmayer Osijek, Osijek, Croatia;

²School of Public Health *Dr Andrija Štampar*, School of Medicine, University of Zagreb, Zagreb, Croatia

Summary

For many years, cancer have been the 2nd leading cause of death, both men and women, in Croatia, and breast cancer is among first three cause of death from cancer in women. Disease, especially cancer, has negative and multidimensional impact on quality of life. The aim of this research was to examine the relation between perceived social support and body image with quality of life in women with breast cancer who undergone surgical treatment mastectomy. Results showed that quality of life after the mastectomy in women with breast cancer was 53.58 %SM which was below the normative range, and indicating decreased QoL. Social support proves to be strongest protective factor for the quality of life in women with breast cancer who undergone mastectomy, and longer time from diagnosis was also associated with higher quality of life. Neither women's age, level of body image disturbance nor type of additional treatment were shown to be significant predictors of the overall QoL. Assessment of quality of life and perceived social support could become a valuable indicator of the success of multidisciplinary treatment and indicate areas where the woman needs additional help and support in order to achieve better quality of life.

KEYWORDS: *quality of life, breast cancer, social support, body image*

INTRODUCTION

For many years, cancer have been the 2nd leading cause of death, both men and women, in Croatia. In 2020, 13,508 people died from neoplasms (333.7 / 100,000 inhabitants)(1). Of these, the diagnosis of breast cancer appears at the 9th place of all causes of death of women and in 2020, when 722 cases with this diagnosis of the cause of death were recorded(1). Breast cancer is the most commonly diagnosed cancer in women in 85% countries in the world(2). The Croatia is one of the countries with a high incidence of breast cancer.

Corresponding author: Gorka Vuletic, Department of Psychology, Faculty of Humanities and Social Sciences in Osijek, Lorenza Jaegera 9, 31000 Osijek, Croatia. e-mail: gorka.vuletic@gmail.com

According to Croatian Institute of Public Health report published in 2020, distribution of new cancer cases in 2018 by site, shows that breast cancer comprises 24% of new cases, that was 2845 women in year 2018(3,4). Also, incidence is growing in last 50 years(2).

Illness is undoubtedly one of the external factors that negatively affects an individual's life. The World Health Organization(5). defines quality of life as an individual's perception of their own position in the specific cultural, social and environmental context in which they live.

Impact of disease, especially cancer, on quality of life is multidimensional. The disease not only affects in terms of physical symptoms and thus limits functioning, but there are also indirect effects such as changes in work ability, potential

isolation, increased dependence on others, etc. All this usually leads to changes in the mental state of the individual. Thus, depression, anxiety, feelings of helplessness, decreased self-confidence and feelings of lack of control can occur(6). The relation between health and subjective quality of life is reflected in Cummins' theory of homeostasis(7). Subjective quality of life is stable and is actively controlled and maintained within a predictable range of positive values, however, negative impacts such as disease, especially cancer, can threaten quality of life(8). Due to the multiple, often large, negative impact of the disease on a person's life, the homeostatic mechanism can no longer maintain a normal level of quality of life, and consequently its decline occurs and persistently low subjective QoL present a substantial risk for depression(9,10,11).

In western society, external appearance plays important role in how others perceive us and how we feel about it. Changing the appearance of a woman's body due to breast cancer treatment (mastectomy, chemotherapy) is a source of psychosocial difficulties for some women. Mastectomy is an important treatment method for breast cancer. However, mastectomy may have substantial negative impact on a woman because, mastectomy as a treatment option, can result in a change in a woman's body appearance, sense of mutilation and diminished self-worth and may threaten perceptions of femininity(12). Negative body image can inevitably affect mood of the woman and her interpersonal relationships, lead to social stigmatization, and consequently social isolation. Also, body image disturbance following treatment of cancer may be associated with a variety of changes that can have a significant impact on quality of life (QoL) Research has shown that the mastectomy has a negative impact on body image and QoL of women and there was a strong positive correlation between body image and QoL(12,13). Furthermore, many women describe alopecia (hair loss) as the most frightening disease related, which has often led to a refusal to continue with chemotherapy. The effect that breast cancer diagnosis and treatment have on quality of life has been researched. Higher levels of initial stress were observed when breast cancer was diagnosed, at the beginning and during treatment. In these patients there is a deterioration in quality of life, which is associated with decreased mental health

(psychosocial disorders, social and psychological disorders). Psychosocial problems usually occur later, during illness (surgery, chemotherapy, radiotherapy). Mentioned disorders can be unnoticed, and can relate to physical functioning and physical problems that limit activities, lead to problems of social functioning and mental health, mood disorders and weakening the overall quality of life(14). In this regard, social support has been also extensively studied. Social support is usually defined as the existence of people on whom we can rely, people who let us know that they care about, value, and love us(15). Social support has several elements, of which five should be taken into consideration when measuring it: direction, availability, description and evaluation, content and social networks(16). Social support has two directions, it could be given and received. Availability refers to whether a person really benefits from social support or it is only potentially available. Description and evaluation of social support describe the situation in which social support might be needed, as well as the satisfaction with received social support. Social support comprises one or more of the following types: emotional, instrumental, informational, and support to self-esteem. Emotional support implies giving or receiving empathy, caring, love and/ or trust, instrumental refers to giving concrete (often financial) aid such as housework or lending money, and informational on the provision of advice and guidance that can be used to address problems. Support to self-esteem refers to giving feedback relevant for self-evaluation (eg. that the people are respected and accepted)(17). Social network refers to the structure of existing social relations ie. sources of social support. Six most important sources are: family, friends, neighbours, colleagues at work, community and professional helpers(16). Previous studies have established that perception of social support availability predicts better adjustment to stressful events(18). Many studies have confirmed the existence of a positive relation between social support and subjective quality of life(19,20,21). Social support is one of the recognized, significant protective factors for QoL in situations of impaired health and disease(20). Irvine, Brown, Crooks, Roberts and Browne point out that social support is a significant factor in the psychosocial adjustment of breast cancer patients, that 20 to 30% of patients

experience impaired quality of life through loss of social roles and functional abilities, social and relationships problems(22). Thus, Neuling and Winefield in the follow-up of breast cancer patients immediately after surgery, and one month and three months after surgery, find a particularly high need for emotional support, primarily from the family(23). Emotional support proved to be the most commonly received type of support, but also the most commonly perceived as inappropriate. The literature on stressful life events, which can include the situation of breast cancer, emphasizes the moderating function of social support. Many studies have confirmed the hypothesis that social support is a contributing factor to stress resilience, and there are consistent findings that married people have friends and family members who support them in better health and quality of life than people with fewer contacts and support(18,24). However, it is believed that the perception of the availability of social support is more important than the concrete use of that support(25). Research into the impact of social support on the incidence and clinical course of cancer, although requiring further research, largely confirms the link between lack of social support but also low levels of social support and increased cancer mortality(26). The importance of social support in the group of cancer patients is evidenced by a study in which the authors found five times higher relative risk of mortality and twice the incidence of hormonally related cancers in socially isolated women(27). Breast cancer social environment is a particularly important area for two reasons: first, social support has been shown to protect a person from the harmful effects of breast cancer as a stressful life event, with the positive effects of social support on physical and mental health support actually received(28). Kisinger et al. (2011) state that women with breast cancer report that the most important person they trust is their partner, and emotional support is the one they most want because it allows them to increase self-confidence and reduce feelings of helplessness(29). Also, breast cancer can indirectly affect interpersonal relationships by limiting patients' social activities, and thus opportunities to participate in social contacts and interactions necessary to preserve the social network. Among the three types of support, emotional shows the strongest association with quality of life(18).

AIM OF STUDY

The aim of this study was to examine the relation between perceived social support and body image with quality of life in women with breast cancer who undergone surgical treatment mastectomy.

MATERIALS AND METHODS

A cross-sectional study was conducted on 71 women from *Mammae* Club Osijek, who had diagnosed breast cancer and undergone a mastectomy. The age range of the participants was from 36 to 85 years (M= 59.79, SD=9.63 years).

General data questionnaire was designed for the purposes of this research, and was used to collect socio-demographic data (age, level of education, marital status), data on the type of treatment and the time from the diagnosis.

Personal Wellbeing Index-PWI-A constructed by International Wellbeing Group, was used to measure subjective QoL(30). It is a multidimensional measure of subjective quality of life. It comprises seven scales assessing satisfaction on seven life domains: standard of living, health, achievements in life, close relationships, safety, community connectedness and future security. Answers are given on an 11 point rating scale with defined end point; where 0 means *not satisfied at all* and 10 means complete satisfaction. Overall index (PWI) is expressed as an arithmetic mean of the results across the seven domains. Results were transformed and presented in the form of percentage of scale maximum (%SM), theoretical range 0-100 %SM. Higher score indicate a better quality of life.

The Body Image Scale (BIS) was used to examine disturbance regard the changes in body image due to breast cancer surgery. The 10-item Body Image Scale was developed by Hopwood et al. in 2001, constructed in collaboration with the European Organisation for Research and Treatment of Cancer (EORTC) Quality of-Life Study Group, to measure affective, behavioural, and cognitive body image perception. Affective items example: feeling feminine, feeling attractive), behavioural items (e.g., finding it hard to look at oneself naked, avoiding people because of appearance), and cognitive items (e.g., satisfied with

appearance or with scar). Answers were given on a 4-point scale (0 *not at all* to 3 *very much*). The total score ranges from 0 to 30 and can be calculated by summing up the 10 items. A higher score means a higher level of body image disturbance(31). Social support was measured with the Social support scale from the research *Unemployed in Croatia: the connection between social support and mental health* conducted in 2004 as part of the project *Human Resources in a Changing World of Work* (project no. 0130406)(24). Scale contains 8 items on which respondent should assess the extent to which close people *give encouragement, give useful information..., ... provide direct help..., etc.* Answers were given on a 4-point scale (never, sometimes, often, always). The answers are coded so that the answer is *never* assigned value 1, answer *sometimes* value 2, answer *often* value 3 and the answer *always* is value of 4. Thus, theoretical range is 8-32. Higher score indicates higher social support. The obtained metric characteristics of the scale show a high internal consistency and speak in favour of the justification of the use of summative results. Reliability coefficient, Cronbach’s alpha is .90(24).

The research was conducted in groups, during the regular meetings of members on the premises of the Club. At the beginning, the participants were read an instruction in which it was explained aim of the research. At the end of the instructions, they were explained that the research was completely anonymous, that their results would be used exclusively for scientific purposes, and data will be presented only at the group level. Questionnaires were then distributed to the participants who agreed to participate in the research, and they were told to contact the researcher regarding any ambiguities regarding the questions asked. The filling time was not limited, and takes on average 15 minutes.

The research was undertaken by the researchers from the Department of Psychology, and was approved by the Faculty of Faculty of Humanities and Social Sciences Ethics Committee, and consistent with the ethical principles of medical research on humans, in accordance with Helsinki the 1975 Declaration, (revised 2000).

RESULTS

Table 1 present sociodemographic characteristics of the sample, and type of treatment. Time

Table 1.

Descriptive statistics for sociodemographic characteristics and type of treatment

		N	%	
Marital status	Married/married de facto	44	61.1	
	Single	9	12.5	
	Widow	19	26.4	
Education	primary school	14	19.4	
	secondary school	45	62.5	
	higher education (higher school, university)	13	18.1	
Additional treatment	Radiation therapy	yes	48	66.7
		no	24	33.3
	Chemotherapy	yes	44	61.1
		no	28	38.9

Table 2.

Descriptive statistics for overall quality of life and domains, social support and body image scale

	M	SD	Min	Max
QOL (PWI)	53.58	23.92	5.71	100
QOL domains				
Material Well-being	52.82	24.85	0	100
Health	49.30	25.43	0	100
Achievement	56.90	28.81	0	100
Close relationships	60.70	27.01	0	100
Safety	53.52	27.47	0	100
Community connectedness	52.96	28.46	0	100
Future security	48.87	26.81	0	100
Social support	14.82	5.79	2	24
Body image (BIS)	12.51	8.00	0	29

from diagnosis range from 4 months to 29 years (M=7.31; SD=6.57 years).

Overall QOL score was in the middle of the scale range indicating relatively low life satisfaction (53.58 % of scale maximum). The highest score is on domain *Close relationships* indicating satisfaction with relationships with close friends and/or family. The lowest score is reported on domain *Health*, and *Future security* indicating low satisfaction with health and with feeling of future security (table 2).

Average score for social support is in the middle scale range, and individual values for social support and body image disturbance are in almost total theoretical range.

Overall QOL were significantly positively related to age (low correlation), illness duration (mid-range correlation) and perceived social sup-

Table 3.
Correlation between quality of life, social support, body image, age and illness duration

		PWI	age	illness duration	social support
QOL (PWI)	r	-			
	Sig. (2-tailed)				
age	r	.296*	-		
	Sig. (2-tailed)	.012	-		
illness duration	r	.455**	.318**	-	
	Sig. (2-tailed)	.000	.007		
social support	r	.733**	.224	.335**	-
	Sig. (2-tailed)	.000	.060	.004	
body image (BIS)	r	-.207	-.271*	-.331**	-.254*
	Sig. (2-tailed)	.083	.023	.005	.033

* p< .05; **p< .001

port (high correlation), indicated that with longer time since the diagnosis, women who are older and those with higher social support have a higher overall quality of life. Low but significant negative correlation was between age and body image

disturbance, means with age increasing body image disturbance decreases.

In order to determine the contribution of individual variables to the explanation of the overall subjective quality of life, a hierarchical regression analysis was performed. The results are shown in Table 4.

Social support is strongest, significant predictor of the overall QoL, while disturbance in body image is not. The magnitude and direction of the regression coefficient indicates that the higher perceived social support is, the higher subjective quality of life will be. Time since diagnosis was, through all steps, significant predictor, although at the lower significance level (p< .05). In total, included predictors explain 52% of the variance of the overall quality of life.

DISCUSSION

Previous research has revealed the capacity of human beings to maintain moderately high lev-

Table 4.
Hierarchical regression analysis showing predictors of overall quality of life

Model	B	β	t	p	
Step 1					
(Constant)	10.730		.539	.592	
age	.512	.206	1.755	.084	
partner	8.274	.169	1.496	.139	
radiation therapy	-6.798	-.135	-1.230	.223	
chemotherapy	.782	.016	.146	.885	ΔR ² = .286**
illness duration	1.522	.418	3.755**	.000	
Step 2					
(Constant)	14.303		.617	.540	
age	.489	.197	1.609	.112	R ² = .287
partner	7.927	.162	1.395	.168	ΔR ² = .001
radiation therapy	-7.175	-.143	-1.259	.213	
chemotherapy	.684	.014	.126	.900	
illness duration	1.483	.407	3.465**	.001	
body image disturbance	-.109	-.036	-.307	.760	
Step 3					
(Constant)	-11.479		-.645	.521	
age	.277	.112	1.204	.233	
partner	3.846	.079	.892	.376	R ² = .603
radiation therapy	-1.199	-.024	-.275	.785	ΔR ² = .317**
chemotherapy	-.726	-.015	-.178	.859	
illness duration	.879	.241	2.642*	.010	
body image disturbance	.184	.062	.683	.497	
social support	2.606	.631	7.089**	.000	

* p< .05; **p< .001

els of subjective QoL in various challenging circumstances. Meta-analysis of research from non-Western countries revealed life satisfaction, expressed as a population mean score, which was found to fall predictably within the range of 60–80% percentage of scale maximum, which was further explained by the theory of homeostasis(7,8,9). According to self-reported satisfaction with specific life domains, the overall quality of life after the mastectomy in women with breast cancer was 53.58 %SM which was below the normative range, and indicating decreased QoL. Decreased QoL can be result of psychological disturbances of the women facing breast cancer diagnosis, it was not rare in patients, and depressive disorders were the most frequent(32). On the other side, researches have shown that decreased QoL and life satisfaction has a negative effect on individual's mental health and everyday functioning, and persistently low quality of life poses a risk for development of depression(33). This becomes circle of negative influence and result in further decrease of QoL. However, it should be highlighted that individual results come in range from very low to highest index scores. Individual differences are expected, and results needs to be understand having in mind that time from diagnosis, and age, was significantly correlated to QoL. Higher QoL and less body image disturbance were associated with being further out from surgery. Findings of some other research also suggest that body image and QoL may improve with time, as patients acclimatize to their *new normal*(34). Social support proved to be the most significant predictor of the total QoL, additionally duration of the illness, expressed as a time from diagnosis, also proved to be significant predictor. In average, the longer time from diagnosis the better QoL are. This confirm assumptions of the subjective QoL Homeostasis theory, that people tend to adapt and regain QoL after negative life events(33). According to the theory of QoL homeostasis we all have internal, psychological, capacity to adapt to negative life events, and maintain our subjective QoL (i.e. satisfaction with life). However, negative influences compromise our homeostasis, and we cannot stand all negative impacts for long time. So, we additionally use external resources to cope with negative life events. Social support is one of the most valuable resource that can help us to cope with taught time in life, helping us to adapt

to new circumstances. In a situation when women undergo mastectomy, her body (image) was changed and adapting to this change takes time and support. Initial uncertainty and fear because of the cancer diagnosis and operation what reduce QoL initially, diminishes over time. Over time, woman can redirect to other values and areas of life and compensate for the deficiency in another area, so the overall QoL level can return to normal again.

Previous Croatian study also showed that breast cancer has a significant negative impact on the quality of life of breast cancer patients. Both functional and symptom scales were more affected in women 1 month after mastectomy. The QoL was considerably improved in women one year after mastectomy compared to those at 1 month (35). In this study, neither women's age, level of body image disturbance nor type of additional treatment were shown to be significant predictors of the overall QoL, in the analysis. Correlation analysis indicates that higher body image disturbance is associated to lower age, shorter time from diagnosis and lower social support. Related to the latter, since this is cross-sectional study, we can only make assumptions about direction of influence of body image on social support perception or vice versa. One possible explanation is that high body image disturbance lead to social withdrawn which lowering social support. On the other hand, women with low social support may attribute this to her body image, may focus her more on her body image which lead to more disturbance. Previous research suggest that a positive perception of a supportive social network can help women with mastectomy to better cope with the psychological effects of surgery on their body image(36).

Practical implications of the results of this study:

The obtained result that social support is a significant positive predictor of QoL opens up the possibility for psychosocial interventions and programs which increase or maintain good social support in order to protect or improve the quality of life when it is threatened by disease. Psychological counselling and strengthening the social support network can help women overcome difficult periods and better cope with illness. Associations of women with breast cancer, act just in that way, by providing and strengthening social sup-

port provide benefits for their QoL. Results also indicate the importance of multidisciplinary approach in health care of oncological patients by which can be improved and maintained good QoL of the patients. Multidisciplinary programs in oncology and cardiology have been associated with enhanced patient well-being and improved clinical outcomes.

In generalizing the obtained results, as well as in comparison with other research, the possible shortcomings of this research should be considered. The limitation is cross-sectional design and relatively small and convenient sample. Since a more realistic insight into the examined problems would be provided by research on a larger sample of participants selected as much as possible per case and heterogeneous sociodemographic characteristics, this is one of the recommendations for future research. Furthermore, all participants are members of Association of patients that provide psychosocial, informational and logistical support to women with cancer. Ill women whose health condition is worse, and those who are hospitalized, could not come to the Association to fill out questionnaires. In addition, older women, and those living in places with limited transport resources, very often in poverty and social isolation, are not members of such Associations. This prevents the generalization of results, but also is source of loss a valuable part of the data that would otherwise offer additional insight into the QoL of women with breast cancer. What is specific for people involved in patients' associations is that, in addition to receiving support in this way, they also provide support to others in a similar situation. Results of this research indicate the positive aspects of women participation in patient's associations. Good social support can compensate negative impact of cancer treatment on women QoL. This widening knowledge about buffering hypothesis of social support in a situations with disease related stress(18).

CONCLUSION

Social support proves to be strong protective factor for the quality of life in women with breast cancer who undergone mastectomy. Assessment of quality of life and perceived social support could become a valuable indicator of the success

of multidisciplinary treatment and indicate areas where the woman needs additional help and support in order to achieve better quality of life and everyday functionality.

REFERENCES

1. Hrvatski zavod za javno zdravstvo. Izvješće o umrlim osobama u Hrvatskoj u 2020. godini. Zagreb; 2021.
2. Šekerija M, Alfirević M, Fabijanić U, Rajačić N, Antoljak N. Epidemiology of cancer in Croatia – recent insights and international comparisons. *Libri Oncologici*. 2019;47(2-3):84-90.
3. Hrvatski zavod za javno zdravstvo. Izvješće o umrlim osobama u Hrvatskoj u 2018. godini. Zagreb; 2019.
4. Croatian Institute of Public Health. Croatian National Cancer Registry. Cancer Incidence in Croatia 2018. Bilten 43, Zagreb; 2020.
5. The WHOQOL Group. Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychol Med*. 1998;28:551-558.
6. Vuletić G, Ivanković D, Davern M. Kvaliteta života u odnosu na zdravlje i bolest. In: Vuletić G. ed. *Kvaliteta života i zdravlje*. Sveučilište Josipa Jurja Strossmayera, Filozofski fakultet, Hrvatska zaklada za znanost, Osijek, 2011. p 120-25.
7. Cummins RA. The second approximation to an international standard for life satisfaction. *Soc Ind Res*. 1998;43(3):307-334.
8. Cummins RA & Nistico H. Maintaining life satisfaction: the role of positive bias. *J Happiness Stud*. 2002; 3:37–69.
9. Cummins RA. Normative life satisfaction: Measurement issues and a homeostatic model. *Soc Ind Res*. 2003;64:225-256.
10. Vuletić Mavrincac. G. Povezanost depresivnosti i anksioznosti s procjenom kvalitete života. *Specijalistički rad*, Filozofski fakultet u Zagrebu; 2007.
11. Vuletić G. Samoprocijenjeno zdravlje i kvaliteta života u Bjelovarsko-bilogorskoj županiji: regionalne razlike i specifičnosti. *Radovi Zavoda za znanstveno istraživački i umjetnički rad u Bjelovaru*. 2013;(7):213-222.
12. Türk KE, Yılmaz M. The Effect on Quality of Life and Body Image of Mastectomy Among Breast Cancer Survivors. *Eur J Breast Health*. 2018;14(4):205-210.
13. Martins Faria B, Martins Rodrigues I, Verri Marquez L, da Silva Pires U, Vilges de Oliveira S. The impact of mastectomy on body image and sexuality in women with breast cancer: a systematic review. *Psicooncologia*. 2021 Jan 1;18(1).
14. Husić S, Brkljačić Žagrović M. Izmijenjen tjelesni izgled žene nakon mastektomije zbog karcinoma dojke uzrokuje poremećaj kvalitete života. *Medicina*. 2010; 46(1):80-85.
15. Cohen S, Syme SL. Issues in the application and study of social support. In: Cohen S, Syme SL, eds. *Social*

- Support and Health. Orlando, FL: Academic Press; 1985. p. 3-22.
16. Tardy CH. Social support: Conceptual Clarification and Options. In: Tardy CH, ed. A Handbook for the study of human communication: methods and instruments for observing, measuring and assessing communication processes. Norwood, New Jersey: Ablex Publishing Corporation; 1988. p. 347-364.
 17. Helgeson V.S. Unmitigated communion and adjustment to breast cancer: Associations and explanations. *J App Soc Psychol.* 2003;33:1643-1661.
 18. Cohen S, Wills TA. Stress, social support, and the buffering hypothesis. *Psychol Bull.* 1985 Sep;98(2):310-57.
 19. Gallagher EN, Vella-Brodrick D. Social support and emotional intelligence as predictors of subjective well-being. *Pers Individ Dif.* 2008;44(7):1551-1561.
 20. Vuletić G. Generational and trans-generational factors of quality of life related to health of student population. [dissertation] University of Zagreb, School of Medicine, Zagreb, Croatia; 2004. (Croatian).
 21. Šincek D. & Vuletić G. Važnost socijalne podrške za kvalitetu života Istraživanje kvalitete života emigranata i osoba koje žive u vlastitoj domovini. In: Vuletić G. ed. Kvaliteta života i zdravlje. Sveučilište Josipa Jurja Strossmayera, Filozofski fakultet, Hrvatska zaklada za znanost, Osijek, 2011. p 52-72.
 22. Irvine D, Brown B, Crooks D, Roberts J, Browne G. Psychosocial adjustment in women with breast cancer. *Cancer.* 1991;67 (4):1097-1117.
 23. Pahljina-Reinić R. Psihosocijalna prilagodba na rak dojke. *Psihologijske teme.* 2004;13:69-90.
 24. Jakovljević, D. Nezaposleni u Hrvatskoj: povezanost socijalne podrške i psihičkog zdravlja. Odsjek za psihologiju Filozofskog fakulteta u Zagrebu. Zagreb; 2004.
 25. Gregurek R, Bras M, Dordević V, Ratković AS, Brajković L. Psychological problems of patients with cancer. *Psychiatr Danub.* 2010 Jun;22(2):227-30.
 26. Waxler-Morrison N, Hislop TG, Mears B, Kan L. Effects of social relationships on survival for women with breast cancer: A prospective study. *Soc Sci Med.* 1991;33(2):177-183.
 27. Reynolds P, Kaplan GA. Social connections and risk for cancer: Prospective evidence from the Alameda County Study. *Behav Med.* 1990;16:101-110.
 28. Roberts CS, Cox CE, Shannon VJ, Wells NL. A closer look at social support as a moderator of stress in breast cancer. *Health Soc Work.* 1994 Aug;19(3):157-64.
 29. Kinsinger SW, Laurenceau JP, Carver CS, Antoni MH. Perceived partner support and psychosexual adjustment to breast cancer. *Psychol Health.* 2011 Dec;26 (12):1571-88.
 30. International Wellbeing Group. Personal Wellbeing Index: 5th Edition. Australian Centre on Quality of Life, Deakin University, Melbourne; 2013. (http://www.deakin.edu.au/research/acqol/instruments/wellbeing_index.htm.)
 31. Hopwood P, Fletcher I, Lee A, Al Ghazal S. A body image scale for use with cancer patients. *Eur J Cancer.* 2001;37(2):189-97.
 32. Ivančić Ravlić I. Psiho-onkološki pristup oboljelima od raka dojke. *Libri Oncologici.* 2014;42(1-3):71-73.
 33. Cummins, R.A. Subjective Wellbeing, Homeostatically Protected Mood and Depression: A Synthesis. *J Happiness Stud.* 2010;11:1–17
 34. Huang J, Chagpar AB. Quality of Life and Body Image as a Function of Time from Mastectomy. *Ann Surg Oncol.* 2018 Oct;25(10):3044-3051.
 35. Pačarić S, Kristek J, Mirat J, Kondža G, Turk T, Farčić N, Orkić Ž, Nemčić A. The quality of life of Croatian women after mastectomy: a cross-sectional single-center study. *BMC Public Health.* 2018 Aug 10;18(1):999.
 36. Spatuzzi R, Vespa A, Lorenzi P, Miccinesi G, Ricciuti M, Cifarelli W, Susi M, Fabrizio T, Ferrari M, G, Ottaviani M, Giulietti M, V, Merico F, Aieta M: Evaluation of Social Support, Quality of Life, and Body Image in Women with Breast Cancer. *Breast Care* 2016;11:28-32.

Sažetak

KVALITETA ŽIVOTA U ODNOSU NA SOCIJALNU PODRŠKU I SLIKU O TIJELU
KOD ŽENA S RAKOM DOJKE NAKON MASTEKTOMIJE

G. Vuletić

Tumori su već dugi niz godina 2. vodeći uzrok smrti, i muškaraca i žena, u Hrvatskoj, a karcinom dojke je među prva tri uzroka smrti od raka kod žena. Bolesti, posebice rak, imaju negativan i višedimenzionalan utjecaj na kvalitetu života. Cilj ovog istraživanja bio je ispitati povezanost percipirane socijalne podrške i slike o tijelu s kvalitetom života u žena s karcinomom dojke koje su podvrgnute mastektomiji. Rezultati su pokazali da je ukupna kvaliteta života iznosila 53,58 % od skalnog maksimuma, što je ispod normativnog raspona i ukazuje na smanjenu kvalitetu života. Socijalna podrška se pokazala najjačim zaštitnim čimbenikom za kvalitetu života, a dulje vrijeme od postavljanja dijagnoze bilo je povezano s višom kvalitetom života. Ni dob, slika o tijelu, niti vrsta dodatnog liječenja nisu se pokazali značajnim prediktorima ukupne kvalitete života. Procjena kvalitete života i percipirane socijalne podrške mogu biti vrijedan pokazatelj uspješnosti multidisciplinarnog liječenja te ukazati na područja u kojima je pacijenticama potrebna dodatna pomoć i podrška kako bi se postigla bolja kvaliteta života.

KLJUČNE RIJEČI: *kvaliteta života, tumor dojke, socijalna podrška, slika tijela*