



Art therapy and its influence on body image in women facing breast cancer

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Summary

Introduction: Breast cancer has both physical and psychosocial consequences. Therefore, within holistic rehabilitation approaches, the implementation of various therapeutic programmes – including those integrating complementary and expressive art-therapies – is recommended. Art therapy is increasingly recognised as a potentially beneficial form of psychological support that can contribute to emotional empowerment and improved quality of life; however, its effects in this population remain insufficiently explored.

Objectives: The study aimed to examine the impact of art therapy on body image in relation to quality of life and emotional well-being in women with breast cancer and in women without breast cancer who are exposed to challenges related to breast cancer within their immediate social network.

Methods: The study was conducted on a sample of 20 women. The therapy programme included visual art expression, music, literary texts, guided imagery, aromatherapy, and reflexology. Data were collected using a socio-demographic questionnaire, the *Body Image Quality of Life Inventory* (BIQLI) and a visual analogue self-assessment scale (VAS) to evaluate emotional well-being.

Result: Participants with breast cancer showed statistically significant improvements on the BIQLI variable measuring self-confidence and on the VAS, reflecting a statistically significant increase in emotional well-being after each of the six therapy sessions. Although no statistically significant differences were found between pre- and post-intervention scores on most evaluated variables, positive trends in the results suggest that art therapy may have a beneficial effect on the body experience, quality of life and emotional regulation.

Conclusion: Further research using larger samples, controlled study designs, and longitudinal follow-ups is recommended to deepen understanding of art therapy's effects and clarify the factors that contribute to its more beneficial outcomes.

KEYWORDS: *art therapy; breast cancer; body image; quality of life; emotional well-being*

INTRODUCTION

Breast cancer affects not only the body physically but also has profound psychosocial consequences(1). Women often experience loss of control, reduced self-esteem, and disturbances in body image, particularly as a result of surgery, chemotherapy, and hormone therapy. These treatments can lead to decreased self-confidence, feelings of lost femininity, and social and intimate insecurity(2-4). Negative body image is associated with higher levels of depression, anxiety, and poorer

quality of life, whereas a positive body image can alleviate psychological distress and facilitate coping and adjustment(6-9). Consequently, holistic rehabilitation approaches recommend interventions to enhance positive body image, including psychological counselling, psychotherapy, support groups, and expressive art therapies(9-12).

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Expressive art-therapies, including visual arts, movement, dance, music, and literary texts, provide safe spaces for emotional expression and identity exploration, fostering self-acceptance and improving quality of life in women with breast cancer(13,14). Through creative engagement, patients can symbolically process illness-related experiences, explore changes in bodily perception, and reconstruct personal narratives that reinforce self-worth(15,16). Research indicates that these therapies reduce depression and anxiety while positively influencing body perception, especially when combined with complementary interventions such as mindfulness, yoga, or guided imagery, which enhance relaxation, self-compassion, and mind-body integration(17,18).

Art therapy, a widely used form of expressive art therapy, integrates creative expression with psychotherapeutic exploration, enabling patients to externalise and process conscious and unconscious emotions through drawing, painting, and modelling(19-22). By engaging with visual representations of the body, women can develop new perspectives on bodily changes, reduce stigma, and strengthen self-identity. The multidimensional nature of body image, encompassing cognitive, affective, and social components, makes it particularly amenable to improvement through these interventions(23-26). Group-based art therapy programmes also provide social support, fostering a sense of community and shared experience, which further reinforces emotional resilience and coping strategies(26,27).

Evidence shows that art therapy fosters emotional awareness, acceptance of one's body, and improved psychological well-being, with some studies demonstrating long-term benefits for autonomy, self-acceptance, and self-love even 5 years post-intervention(28). Overall, these findings support the inclusion of art therapy within comprehensive psychosocial care for women with breast cancer, promoting emotional resources, positive body perception, personal identity, and long-term psychological resilience.

RESEARCH OBJECTIVE

Women with breast cancer often face lasting psychosocial effects, including altered body image, changes in self-experience, and emotional distress.

Art therapy is increasingly recognised as a potentially valuable form of psychological support that can contribute to emotional empowerment and improve quality of life; however, its effects in this population remain insufficiently studied. Therefore, this study aimed to examine the impact of art therapy on body image in relation to quality of life and emotional well-being in women with breast cancer, as well as in women without breast cancer who are exposed to challenges related to breast cancer within their immediate social network.

METHODS

Sample

The initial sample consisted of 20 women who were members of breast cancer associations. Of these, 12 had breast cancer, along with additional conditions such as Hashimoto's thyroiditis, depression, peripheral neuropathy, thrombosis, thrombocytosis, metastatic bone disease, nephrectomy, and cancers of the kidney, ovary, or uterus. The remaining eight participants did not have breast cancer, although some had other health issues, including arterial hypertension, brain cysts, angina pectoris, and rheumatoid arthritis.

Because some participants did not attend all therapy sessions, this study reports findings for the 10 women who completed all six sessions. Challenges in selecting a sample suitable for statistical analysis from the total number of therapy participants are common in both open and closed group settings, due to factors affecting session continuity, as noted in similar research(29). Among the 10 participants included in the statistical analysis, six had breast cancer (aged 52–67 years, mean 59.5), while four did not (aged 57–78 years, mean 67.5).

This study did not involve any medical interventions. All applied techniques and methods were non-invasive, and some of the art-based activities were already provided by the host association. According to the association's rules, this type of research does not require ethics committee approval, so no review was conducted. All participants were fully informed of the study's purpose and procedures, and they provided written informed consent. They were assured that anonymity would be maintained and that the research would adhere to

ethical principles in accordance with the Code of Ethics of the Croatian Committee on Ethics in Science and Higher Education(30). Throughout the study, the principles of honesty, responsibility, respect for human dignity, and academic integrity were strictly observed. Collected data were processed and stored anonymously, ensuring confidentiality and the protection of participants in line with professional and ethical standards.

Variables and Instruments

To collect basic personal data (e.g., gender, age, and medical diagnosis), a socio-demographic questionnaire was administered. Body image was assessed using the *Body Image Quality of Life Inventory* (BIQLI), a validated instrument designed to quantify the impact of body image on various aspects of quality of life(31). The BIQLI demonstrates excellent internal consistency (Cronbach's $\alpha = 0.95$) and satisfactory test-retest reliability ($r = 0.79$). Responses are recorded on a 7-point scale, ranging from -3 (very negative impact) to +3 (very positive impact), with 0 indicating no perceived impact. Higher scores indicate greater body satisfaction, lower levels of shame, and reduced preoccupation with appearance. The BIQLI was administered at two time points: before and after completion of the therapy programme. Emotional state was assessed using a *Visual Analogue Scale* (VAS) with the prompt, *How do you feel right now?* Participants indicated their current emotional intensity along a 100-mm horizontal line, ranging from very poor to excellent, based on subjective perception and personal experience. The VAS is widely used for subjective measures of chronic or acute pain, as well as for various psychosocial dimensions, tailored to the study's objectives and content. Scores are obtained by measuring the position marked in millimetres, with changes monitored across assessment points. This approach yields interval- or ratio-level data suitable for analyses at both the individual and group levels(32). In this study, the VAS was administered to each participant at the beginning and end of every therapy session.

Research Procedure

For this study, six art therapy sessions were held once a week, each lasting 90 minutes. The sessions were designed to promote self-expression,

introspective reflection, connection with the body, and the strengthening of emotional resources. In addition to visual art, other artistic media (music, literary texts) and various complementary therapies (guided imagery, aromatherapy, reflexology) were used. Techniques and methods were chosen to create a space for exploration and playful engagement with different perspectives in coping with one's own and others' life stories (see Table 1). Through colours, shapes, text, sound, and sensory experiences, participants were encouraged to explore their inner world, experience the strength and beauty of their bodies, and rediscover their emotional and physical wholeness through art.

Statistical Analysis

Descriptive statistical methods (arithmetic mean, standard deviation, minimum, and maximum) were used to present the basic characteristics of the sample and the results for individual variables. Due to the small sample size, non-parametric statistical methods were applied. The Wilcoxon signed-rank test was used to examine differences between pre- and post-intervention results within groups for the observed variables, while the Mann-Whitney U test was used to compare results between groups of women with and without breast cancer. No corrections for multiple comparisons were applied. Data analysis was performed using IBM SPSS Statistics (Version 31).

RESULTS

Table 2 presents the descriptive results obtained on the BIQLI before and after the therapy programme, as well as from the VAS before and after each of the six therapy sessions for women with and without breast cancer.

The results obtained on BIQLI in women with breast cancer show an increase in mean scores across all variables after the therapy programme, indicating overall improvement in categories such as greater body satisfaction, reduced feelings of shame, and decreased preoccupation with appearance. In women without breast cancer, mean scores also increased in all variables except for *How confident I feel in everyday life*.

The differences between women with and without breast cancer in BIQLI scores before and

Table 1.

Descriptions of the goals, techniques, and methods used in therapy sessions

	Session goals	Applied Techniques and Methods
Session 1	<ul style="list-style-type: none"> Facilitating connection and mutual acquaintance, promoting positive group dynamics, creative self-expression, introspection, awareness of coping mechanisms, visualization of positive changes 	<ul style="list-style-type: none"> Drawing a personal mandala using symbols, colours, and shapes representing participants' identity, emotions, and personal values Using figurines as an <i>intermediary object</i> to raise awareness and acceptance of oneself and one's <i>inner helper</i> Group feedback Guided imagery
Session 2	<ul style="list-style-type: none"> Enhancing awareness of internal and external support resources, encouraging mutual support, appreciating the value and beauty of one's body, relaxation 	<ul style="list-style-type: none"> Modelling a figurine from clay symbolising an <i>inner helper</i> in the process of coping with illness and accepting one's body Group completion of participants' facial outlines using realistic or abstract elements, symbols, words, or colours Group feedback Guided imagery
Session 3	<ul style="list-style-type: none"> Encouraging sensory perception and emotional expression, fostering connection with one's body through touch and smell, promoting tenderness and self-care, relaxation 	<ul style="list-style-type: none"> Painting mandalas inspired by the text from <i>The Little Prince</i> Encouraging playful interaction with visual symbols using scents and touch through essential oils and reflexology Group feedback Guided imagery
Session 4	<ul style="list-style-type: none"> Promoting introspection, affirming personal strengths, fostering a sense of community, releasing emotional burden, developing empathy, experience sharing, relaxation and visualization 	<ul style="list-style-type: none"> Drawing of emotional states inspired by using theme of <i>Three</i> Drawing the cover of one's significant life story and writing a Letter to oneself with symbolic illustration Group feedback Guided imagery
Session 5	<ul style="list-style-type: none"> Promoting insight into key life phases (past, present, future); strengthening emotional resources; sharing experiences; fostering community; relaxation and visualization 	<ul style="list-style-type: none"> Visual and literary description of <i>Personal life journey</i> Drawing symbols representing emotions associated with illness and recovery Group feedback Guided imagery
Session 6	<ul style="list-style-type: none"> Promoting positive group dynamics, comfort, and pleasure 	<ul style="list-style-type: none"> Sharing experiences of <i>One of The Best Part of the Day</i> <i>Paint and Chai</i> – enjoying different tea aromas while painting a nature-inspired motif Group feedback Guided imagery

after the therapy programme, as well as VAS scores before and after each of the six therapy sessions, are shown in the Appendix (Table 4). No statistically significant differences were found between the two groups for any BIQLI or VAS variable.

Table 3 presents within-group differences in BIQLI and VAS scores before and after the therapy programme and before and after each of the six therapy sessions, separately for women with and without breast cancer.

In women with breast cancer, statistically significant pre- to post-intervention differences were observed on the BIQLI variable *My basic feelings about myself – feelings of self-worth and self-respect*, with post-therapy scores showing significant improvement (BC $W = 0$, $p = 0.038$). Similarly, on the

VAS, emotional well-being scores were significantly higher after each of the six therapy sessions (all $p = 0.027–0.028$). In women without breast cancer, no statistically significant changes were observed in any of the assessed variables.

DISCUSSION

The results of this study indicate a positive effect of art therapy on body image in women with breast cancer, as well as in women without breast cancer who are exposed to challenges related to breast cancer within their immediate social network. Participants diagnosed with breast cancer showed significant improvements on the

Table 2.

Descriptive results obtained on the BIQLI and VAS

BIQLI items & VAS sessions	Mean \pm Std. Deviation			
	BC Pre (n=6)	BC Post (n=6)	Non-BC Pre (n=4)	Non-BC Post (n=4)
My basic feelings about myself – feelings of self-worth and self-respect	0.83 \pm 1.835	2.17 \pm 1.169	2.50 \pm 0.577	2.75 \pm 0.500
My feelings about my adequacy as a man or woman – feelings of masculinity or femininity	1.83 \pm 1.169	2.50 \pm 0.548	1.75 \pm 0.500	2.25 \pm 0.500
My interactions with people of the same sex	1.00 \pm 2.280	2.33 \pm 0.516	1.00 \pm 0.816	2.50 \pm 0.577
My interactions with people of the opposite sex	2.00 \pm 1.265	2.67 \pm 0.516	0.75 \pm 0.500	2.50 \pm 0.577
My experiences when meeting new people	2.17 \pm 0.753	2.67 \pm 0.816	2.00 \pm 0.816	2.50 \pm 0.577
My experiences at work or school	1.67 \pm 1.033	2.67 \pm 0.516	1.25 \pm 1.500	2.50 \pm 0.577
My relationships with friends	2.17 \pm 1.169	3.00 \pm 0.000	2.00 \pm 1.414	3.00 \pm 0.000
My relationships with family members	1.83 \pm 1.169	2.83 \pm 0.408	2.75 \pm 0.500	3.00 \pm 0.000
My everyday emotions	1.50 \pm 0.837	2.00 \pm 1.549	1.25 \pm 1.708	1.75 \pm 0.500
My satisfaction with life in general	1.33 \pm 0.516	2.50 \pm 0.837	1.00 \pm 2.000	2.25 \pm 0.500
My ability to control what and how much I eat.	0.83 \pm 2.041	1.83 \pm 1.169	0.00 \pm 2.160	2.25 \pm 0.500
My ability to control my body weight	0.83 \pm 1.169	1.67 \pm 1.211	0.75 \pm 2.630	2.00 \pm 0.816
My activities related to exercise	1.50 \pm 1.761	1.50 \pm 2.345	-0.25 \pm 1.708	1.75 \pm 1.500
My willingness to engage in activities that might draw attention to my appearance	0.67 \pm 1.751	2.00 \pm 0.894	-0.25 \pm 1.893	1.75 \pm 0.957
My daily grooming activities (e.g., dressing and getting ready for the day)	1.00 \pm 1.789	2.17 \pm 0.753	0.75 \pm 0.957	2.25 \pm 0.500
How confident I feel in everyday life	1.00 \pm 1.673	1.83 \pm 1.941	2.75 \pm 0.500	2.25 \pm 0.500
How happy I feel in everyday life	0.83 \pm 2.229	1.83 \pm 1.941	2.25 \pm 0.500	2.75 \pm 0.500
Visual Analog Scale 1	62.67 \pm 26.319	82.17 \pm 14.345	63.00 \pm 9.055	87.00 \pm 9.092
Visual Analog Scale 2	46.67 \pm 26.530	85.00 \pm 9.209	55.25 \pm 4.113	75.75 \pm 12.500
Visual Analog Scale 3	62.67 \pm 31.252	80.67 \pm 20.314	66.25 \pm 15.019	90.25 \pm 4.500
Visual Analog Scale 4	45.17 \pm 34.091	78.67 \pm 20.471	67.00 \pm 8.869	88.00 \pm 12.437
Visual Analog Scale 5	58.67 \pm 26.756	86.67 \pm 9.331	65.25 \pm 12.258	85.00 \pm 10.000
Visual Analog Scale 6	64.00 \pm 36.535	92.00 \pm 10.450	75.00 \pm 7.348	95.00 \pm 4.163

Legend: BC Pre = results of women with breast cancer before therapy, BC Post= results of women with breast cancer after therapy, Non-BC Pre= results of women without breast cancer before therapy, Non-BC Post= results of women without breast cancer after therapy

BIQLI variable measuring self-confidence in daily life, as well as on the VAS, reflecting a statistically significant increase in emotional well-being after each of the six therapy sessions. These findings suggest that art therapy can be an effective tool for enhancing emotional resources and promoting a positive perception of one's body in women coping with the consequences of breast cancer and its treatment. In the control group of women without breast cancer, mean BIQLI scores also increased, except in the domain of daily life self-confidence. However, no statistically significant changes in emotional well-being were observed in this group, suggesting that the effects of art therapy may be more pronounced in individuals facing more intense emotional and psychosocial

challenges. These findings support the hypothesis that therapeutic programmes incorporating creative expression have the greatest impact on populations experiencing specific stressors or traumatic events(33). Nevertheless, no statistically significant differences were found between women with and without breast cancer for any BIQLI or VAS variable. This may indicate that women not diagnosed with breast cancer but exposed to the emotional and social consequences of illness in close relations can also experience some degree of emotional engagement and benefit from art therapy. These results align with previous findings suggesting that participation in therapeutic and creative groups can positively influence empathy, social support, and emotional

Table 3.

Within-group differences (post – pre) in BIQLI and VAS scores for women with and without breast cancer

BIQLI items & VAS sessions	Breast cancer (n=6)			Non-breast cancer (n=4)		
	W	p	Direction (Pre-Post)	W	p	Direction (Pre-Post)
My basic feelings about myself – feelings of self-worth and self-respect	0	0.038	improvement	0	0.317	ns
My feelings about my adequacy as a man or woman – feelings of masculinity or femininity	0	0.102	ns	0	0.317	ns
My interactions with people of the same sex	0	0.109	ns	0	0.063	ns
My interactions with people of the opposite sex	0	0.157	ns	0	0.066	ns
My experiences when meeting new people	4.50	0.408	ns	0	0.157	ns
My experiences at work or school	0	0.063	ns	0	0.102	ns
My relationships with friends	0	0.102	ns	0	0.180	ns
My relationships with family members	0	0.109	ns	0	0.317	ns
My everyday emotions	4.50	0.408	ns	1.5	0.414	ns
My satisfaction with life in general	0	0.059	ns	0	0.180	ns
My ability to control what and how much I eat	6.50	0.395	ns	1	0.144	ns
My ability to control my body weight	1.50	0.197	ns	3	0.465	ns
My activities related to exercise	5	1.000	ns	0	0.109	ns
My willingness to engage in activities that might draw attention to my appearance	4	0.168	ns	0	0.102	ns
My daily grooming activities (e.g., dressing and getting ready for the day)	1	0.141	ns	0	0.109	ns
How confident I feel in everyday life	1.5	0.197	ns	0	0.157	ns
How happy I feel in everyday life	0	0.063	ns	0	0.157	ns
Visual Analog Scale 1	0	0.028	improvement	0	0.068	ns
Visual Analog Scale 2	0	0.028	improvement	0	0.068	ns
Visual Analog Scale 3	0	0.027	improvement	0	0.068	ns
Visual Analog Scale 4	0	0.028	improvement	0	0.109	ns
Visual Analog Scale 5	0	0.028	improvement	0	0.068	ns
Visual Analog Scale 6	0	0.028	improvement	0	0.068	ns

Legend: W= Wilcoxon W statistic, p=statistically significance, ns=non-significant

resilience in individuals closely connected to oncology patients(34).

Emotional well-being and body image interact dynamically, mutually influencing one another. The growing body of research suggests that improvements in emotional well-being serve as a critical pathway through which changes in body image may occur. Emotional well-being and enhanced emotional regulation have been consistently associated with lower levels of body dissatisfaction and appearance-related concerns(35,36). Individuals experiencing improved emotional functioning are less likely to engage in maladaptive cognitive processes such as negative self-talk, body-related rumination, and social comparison, which are known contributors to body image disturbance(37). Furthermore, enhanced emotional

well-being is linked to greater self-compassion and psychological flexibility, allowing individuals to adopt a more accepting and less evaluative stance towards their bodies(38). Empirical evidence indicates that interventions targeting self-compassion and emotional regulation lead to significant reductions in body dissatisfaction, supporting the role of emotional well-being as a mechanism of change(39,40). As emotional well-being improves, self-worth becomes less contingent on appearance, reducing vulnerability to sociocultural pressures to conform to appearance norms and to objectification(41). And vice versa, other research on breast cancer survivors has found that a positive body image correlates with higher levels of emotional well-being and lower psychological inflexibility, suggesting that a better

perception of one's body reduces overall psychological distress(42,43).

The results of this study suggest that art therapy may be considered as an appropriate supportive approach in the treatment of oncology patients. Similar effects of art therapy have been reported in previous studies, highlighting that creative processes contribute to reduced fatigue, increased motivation, social well-being, introspection, emotional regulation, and enhanced self-esteem in women who have experienced breast cancer(44-46). Art therapy, especially when combined with music, literary texts, guided imagery, reflexology, and aromatherapy, provides a multilayered stimulus that promotes the expression and integration of emotional experiences, thereby improving overall quality of life(47-49). The positive effects of art therapy can be explained by the fact that creative processes enable symbolic expression of complex emotional experiences that are difficult to verbalise, thereby reducing psychological stress and enhancing a sense of control over one's body and emotions. The combined use of visual, auditory, and somatic stimuli is particularly valuable, as it facilitates the integration of sensory experiences, bodily comfort, and the perception of bodily wholeness, which is especially relevant for women experiencing altered body image following breast cancer treatment(50). Furthermore, group sessions foster social connectedness, the exchange of experiences, and a sense of belonging, which contribute to emotional stability and feelings of understanding and acceptance(51).

Despite findings indicating beneficial effects of art therapy, this study has certain limitations. First, a small number of participants were selected from the total sample based on the inclusion criterion of attending all sessions. Additionally, sample heterogeneity, including the presence of various chronic illnesses and comorbidities, may have influenced individual responses to therapy. As long-term follow-up was not part of this study, it was not possible to assess the durability of art therapy effects on body image and emotional well-being. Future studies with larger samples, controlled designs, and long-term follow-up are recommended to further investigate the effects of art therapy and identify factors that enhance its positive impact.

CONCLUSION

The findings of this study suggest that art therapy can positively impact body image, quality of life, and emotional well-being. Increases in self-confidence and emotional satisfaction highlight the potential of creative expression as a tool for psychosocial empowerment. Although statistically significant differences between pre- and post-intervention assessments were not observed for most variables, the presence of positive trends indicates that art therapy may provide meaningful psychosocial support to both women with breast cancer and women without the disease who are closely exposed to its associated challenges. The data collected, together with participants' reported experiences during and after each therapy session, highlight the capacity of art expression to serve as a bridge between the inner self and bodily perception, facilitating the articulation and integration of experiences that are otherwise difficult to express verbally. Through carefully selected forms, colours, texts, and sounds, complemented by pleasurable sensory stimulation, participants reported a reconnection with their femininity, the shaping and enlivening of their bodies in image and symbol, and the discovery and cultivation of emotional and bodily wholeness through art.

However, the limitations of this study point to several directions for future research. Subsequent studies should include larger and more homogeneous samples to improve the generalisability of findings and enable analysis of the effects of comorbidities and sociodemographic variables. Also, a greater number of therapy sessions may have led to more pronounced improvements, and future studies should explore whether increasing the frequency or duration of sessions enhances the effectiveness of art therapy. Longitudinal follow-up is recommended to assess the durability of improvements in body image and emotional well-being. Investigating the effects of various combinations of artistic media and complementary therapies could further define optimal session modalities and structures, not only for women with breast cancer but also for other oncology populations. Additionally, examining the applicability of these therapeutic programmes for individuals indirectly affected by the disease, such as family members or close caregivers, would provide a more comprehensive understanding of the

psychosocial impact of art therapy. Collectively, such research would contribute to the development of more effective, holistic therapeutic programmes aimed at enhancing emotional resilience and quality of life for individuals facing the multifaceted physical, psychological, and social challenges associated with cancer.

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Sažetak

Utjecaj likovne terapije na sliku tijela u žena koje se suočavaju s rakom dojke

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Uvod: Rak dojke, uz svoje fizičke, ima i značajne psihosocijalne posljedice. Stoga se unutar holističkih rehabilitacijskih pristupa preporučuje provedba različitih terapijskih programa – uključujući i one koji integriraju komplementarne i ekspresivne art-terapije. Likovna terapija se sve više prepoznaje kao potencijalno korisna forma psihološke podrške koja može pridonijeti emocionalnom osnaživanju i poboljšanju kvalitete života; međutim, njezini učinci u ovoj populaciji još uvijek nisu dovoljno istraženi.

Ciljevi: Cilj istraživanja bio je ispitati utjecaj likovne terapije na sliku tijela u odnosu na kvalitetu života i emocionalno blagostanje žena oboljelih od raka dojke te žena koje nemaju rak dojke ali su izložene izazovima povezanim s rakom dojke unutar svoje uže socijalne okoline.

Metode: Istraživanje je provedeno na uzorku od 20 žena. Terapijski program uključivao je likovno izražavanje u kombinaciji s glazbom, književnim tekstom, vođenom imaginacijom, aromaterapijom i refleksoterapijom. Podaci su prikupljeni pomoću sociodemografskog upitnika, Body Image Quality of Life Inventory (BIQLI) upitnika i vizualno analogne skale samoprocjene (VAS) za procjenu emocionalnog stanja.

Rezultati: Sudionice oboljele od raka dojke pokazale su statistički značajno poboljšanje na varijabli BIQLI koja mjeri samopouzdanje u svakodnevnom životu te u emocionalnom blagostanju, prema VAS, nakon svake od šest terapijskih seansi. Iako na većini ispitivanih varijabli nisu pronađene statistički značajne razlike između rezultata dobivenih prije i nakon terapijskog programa, pozitivni trendovi u rezultatima sugeriraju da likovna terapija može imati povoljan učinak na doživljaj tijela, kvalitetu života i emocionalnu regulaciju.

Zaključak: Preporučuju se daljnja istraživanja na većim uzorcima, s kontroliranim istraživačkim dizajnom i longitudinalnim praćenjem, kako bi se detaljnije razumjeli učinci likovne terapije te definirali čimbenici koji bi doprinijeli njezinim učinkovitijim ishodima.

KLJUČNE RIJEČI: *likovna terapija, rak dojke, slika tijela, kvaliteta života, emocionalno dobrostanje*

Appendix

Table 4.

Differences between women with (n=6) and without breast cancer (n=4) in BIQLI and VAS scores pre and post treatment

BIQLI items & VAS sessions		Mann-Whitney U	p	Direction of the effect
My basic feelings about myself – feelings of self-worth and self-respect	Pre	5.000	0.118	BC < non-BC (ns)
My basic feelings about myself – feelings of self-worth and self-respect	Post	8.500	0.393	BC < non-BC (ns)
My feelings about my adequacy as a man or woman – feelings of masculinity or femininity	Pre	10.500	0.731	BC > non-BC (ns)
My feelings about my adequacy as a man or woman – feelings of masculinity or femininity	Post	9.000	0.453	BC > non-BC (ns)
My interactions with people of the same sex	Pre	10.000	0.663	BC > non-BC (ns)
My interactions with people of the same sex	Post	10.000	0.617	BC < non-BC (ns)
My interactions with people of the opposite sex	Pre	5.000	0.118	BC > non-BC (ns)
My interactions with people of the opposite sex	Post	10.000	0.617	BC > non-BC (ns)
My experiences when meeting new people	Pre	10.500	0.728	BC > non-BC (ns)
My experiences when meeting new people	Post	9.000	0.429	BC > non-BC (ns)
My experiences at work or school	Pre	10.500	0.719	BC > non-BC (ns)
My experiences at work or school	Post	10.000	0.617	BC > non-BC (ns)
My relationships with friends	Pre	11.500	0.908	BC > non-BC (ns)
My relationships with friends	Post	12.000	1.000	BC > non-BC (ns)
My relationships with family members	Pre	6.000	0.166	BC < non-BC (ns)
My relationships with family members	Post	10.000	0.414	BC < non-BC (ns)
My everyday emotions	Pre	11.500	0.909	BC > non-BC (ns)
My everyday emotions	Post	7.000	0.249	BC > non-BC (ns)
My satisfaction with life in general	Pre	9.000	0.480	BC < non-BC (ns)
My satisfaction with life in general	Post	8.500	0.409	BC > non-BC (ns)
My ability to control what and how much I eat	Pre	9.500	0.581	BC > non-BC (ns)
My ability to control what and how much I eat	Post	10.000	0.645	BC < non-BC (ns)
My ability to control my body weight	Pre	11.500	0.914	BC < non-BC (ns)
My ability to control my body weight	Post	10.000	0.658	BC < non-BC (ns)
My activities related to exercise	Pre	5.000	0.128	BC > non-BC (ns)
My activities related to exercise	Post	11.500	0.909	BC > non-BC (ns)
My willingness to engage in activities that might draw attention to my appearance	Pre	9.000	0.512	BC > non-BC (ns)
My willingness to engage in activities that might draw attention to my appearance	Post	10.000	0.651	BC > non-BC (ns)
My daily grooming activities (e.g., dressing and getting ready for the day)	Pre	9.500	0.584	BC > non-BC (ns)
My daily grooming activities (e.g., dressing and getting ready for the day)	Post	11.500	0.903	BC < non-BC (ns)
How confident I feel in everyday life	Pre	3.500	0.057	BC < non-BC (ns)
How confident I feel in everyday life	Post	10.500	0.724	BC > non-BC (ns)
How happy I feel in everyday life	Pre	7.000	0.273	BC < non-BC (ns)
How happy I feel in everyday life	Post	8.500	0.393	BC < non-BC (ns)
Visual Analog Scale 1	Pre	10.500	0.747	BC < non-BC (ns)
Visual Analog Scale 1	Post	9.500	0.593	BC < non-BC (ns)
Visual Analog Scale 2	Pre	7.000	0.285	BC < non-BC (ns)

Visual Analog Scale 2	Post	5.000	0.136	BC < non-BC (ns)
Visual Analog Scale 3	Pre	11.500	0.915	BC > non-BC (ns)
Visual Analog Scale 3	Post	10.000	0.668	BC < non-BC (ns)
Visual Analog Scale 4	Pre	6.000	0.195	BC < non-BC (ns)
Visual Analog Scale 4	Post	9.000	0.522	BC < non-BC (ns)
Visual Analog Scale 5	Pre	10.000	0.668	BC < non-BC (ns)
Visual Analog Scale 5	Post	12.000	1.000	BC > non-BC (ns)
Visual Analog Scale 6	Pre	11.500	0.915	BC < non-BC (ns)
Visual Analog Scale 6	Post	11.500	0.914	BC < non-BC (ns)

Legend: Pre=before therapy, Post=after therapy, BC=women with breast cancer, non-BC=women without breast cancer, ns=non-significant