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Psychosocial Adaptation and Quality of Life of Female Breast Cancer Survivors

Violeta Tadić[1] & Ana Batrićević[2]

Institute of Criminological and Sociological Research, Belgrade, Serbia

Women with breast cancer face numerous challenges not only in the domain of physical health but also in mental well-being. Their psychosocial adjustment occurs under continuous health-related, psycho-emotional, and social burdens. The aim of this study was to examine psychosocial adaptation and resilience in a sample of women with breast cancer using the Psychosocial Adjustment to Illness Scale (PAIS-SR) and the Resilience Scale (RS). The sample consisted of 33 women aged 40–76 years (M = 55.82, SD = 8.35). Data were analysed using descriptive and multivariate statistical methods. The findings indicate generally adaptive psychosocial adjustment alongside moderate to high levels of resilience. Higher resilience was positively associated with better personal health care orientation, more positive emotional responses, greater understanding of treatment, stronger social and family support, and higher satisfaction with medical services. These findings underscore the need for holistic approaches that integrate psychosocial support with medical care. Future research should build upon these findings by employing larger samples, longitudinal designs, and mixed-method approaches to inform the development of individualized support models and tailored intervention strategies.

KEYWORDS: breast cancer / resilience / psychosocial adjustment / family support / quality of life

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Correspondence: a.batricevic@yahoo.com, Institute of Criminological and Sociological Research, Gračanička 18, Belgrade, Serbia

[1] ORCID https://orcid.org/0009-0000-6060-8243

[2] ORCID https://orcid.org/0000-0002-1727-4222

Introduction

Being accountable for nearly one in six deaths in general and one in four deaths from noncommunicable diseases in the world, cancer is considered the most serious social, public health and economic issue of the 21st century (Bray et al., 2024). It is estimated that roughly one out of five men or women are diagnosed with cancer during their life, whereas circa one in nine men and one in 12 women pass away from this disease (Bray et al., 2024, p. 232). Breast cancer is the most commonly diagnosed type of cancer among women – per minute four women are diagnosed with, and one woman dies from this disease worldwide (Kim et al., 2025). Among women, breast cancer also appears to be the principal cause of cancer death (Bray et al., 2024, p. 232). For example, in 2022 at the global level around 2.3 million new diagnoses of breast cancer were recorded, whereas 670 000 persons died from it (International Agency for Research on Cancer – IARC, 2025).

Significant geographical variations have been detected in the burden of breast cancer, but there is no doubt that it represents a significant cause of premature mortality of women, especially in transitioning countries (Arnold et al., 2022). Breast cancer mortality rate did not vary considerably between the 1930s and the 1970s, but since the 1980s, the countries that introduced early detection programmes and a variety of treatments are experiencing a higher survival rate (Batrićević & Kubiček, 2021, p. 632; World Health Organisation – WHO, 2025). Although there has been an increase in the number of newly diagnosed cases of breast cancer in the most developed countries, their efficient healthcare systems providing prompt diagnosis and high-quality treatments, contributed to the 5-year survival rate exceeding 90% (Kim et al., 2025). This means that women from transitioned countries do have significantly higher incidence rates in comparison to women from transitioning countries, but, at the same time, their mortality rates are substantially lower (Bray et al., 2024, p. 251).

In less and medium developed countries, the incidence rates for breast cancer are still rather low, but their mortality rate is much higher, primarily due to delayed diagnosis and lower rates of treatment beginning and completion (Kim et al., 2025). Apart from the aforementioned, there are other circumstances affecting the survival rate including social and financial conditions, healthcare system quality, public awareness level and education about this issue, as well as the overall position of women in a specific society (Batrićević & Kubiček, 2021, p. 633). When it comes to survival rate, one should also take into consideration the fact that depression and feeling of hopelessness among cancer patients cause their suicide rate to be twice higher in comparison to general population (Anguiano, et al., 2012, p. 14; Batrićević & Kubiček, 2021, p. 633; Schomberg et al., 2025).

Available statistics suggest that breast cancer is the most common type of cancer among women in Serbia and the third most common cause of death among women between 45 and 65 years of age, after cerebrovascular and ischaemic heart disease (Vicko, 2025, p. 5)[3]. It is estimated that between 2016 and 2022 the average number of women diagnosed with breast cancer annually in Serbia was 4481 (Vicko, 2025, p. 5). Latest reports published by the Institute for Public Health of the Republic of Serbia confirm that there were 4489 new diagnoses of female breast cancer in 2022, whereas the number of women who died from this disease in the same year was 1646 (Vicko, 2025, p. 6). In the period between 2013 and 2022, when organized breast cancer screening was introduced to and implemented in Serbian health care system, an increase of 38.3% was detected in the number of women diagnosed with this disease, whereas the number of women who passed away from breast cancer decreased per 16.9% (Vicko, 2025, p. 6). This slight decrease in mortality rate could be interpreted as the consequence of early detection due to screening implementation as well as the result of the application of more efficient therapies.

Statistics about the incidence and survival/mortality rate among female breast cancer patients provide only a partial insight into this complex and multifaceted phenomenon, and they cannot detect the consequences of this disease that expand beyond the sphere of medicine, deeply affecting all aspects of survivors' lives. The overall increase in the number of cancer survivors (Annunziata et al., 2018, p. 651), including breast cancer survivors as well, is producing a growing interest in the exploration of the quality of their lives (Roine et al., 2021, p. 110). At this point, it should be mentioned that the World Health Organisation first defined health in 1949 as "s a state of complete psychological and social wellbeing" and quality of life in 1996 as "the individual's experience of his/her own life situation in the context of his/her culture and value system, and also with respect to his/her goals, expectations and standards" (Owczarek, 2010; WHO, 1996).

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[3] See also: Leading causes of death, Serbia, World Health Organization, https://data.who.int/countries/688, accessed on 04.12.2025.

As the consequence of a more holistic approach to human nature, the concept of quality of life started to emerge in the medical sciences in the 1970s, for the research of repercussions of diseases and medical interventions on various aspects of individual’s life (Owczarek, 2010). This concept has become particularly important in the context of cancer treatment interventions based upon supportive-care, which takes into consideration the quality of patients’ lives (Cella, 1994, p. 186).

Quality of life is perceived as multidimensional, since it includes physical, functional, emotional, and social well-being and as subjective, since it can be fully understood solely from the perspective of the patient (Cella, 1994, p. 186). Nevertheless, psychosocial adjustment seems to be the most impactful component of patients' quality of life (Falegas et al., 2007; Schulze et al., 2014; Wang et al., 2024). It is defined as the patients' capability to “adapt and coordinate” in various aspects of life, including social and family life (Stantnon & Bower, 2015; Wang et al., 2024). Psychosocial adjustment to disease, particularly chronic disease, is dynamic and multifaceted and includes several intertwined elements that exceed cognitive and behavioural as well as emotional, physical and interpersonal aspects (Stanton et al., 2007, p. 567).

In the case of cancer patients, psychosocial adaptation represents a complex and dynamic process, throughout which the patients have to handle emotional stress, face with and struggle to solve various illness related issues and attempt to develop a sense of control, as well as to overcome various obstacles in the post-treatment, i.e. recovery process (Boland et al., 2020; Zhu et al., 2024). Psychosocial adaptation to cancer has a strong impact on patient’s survival and quality of life but also produces repercussions on patient’s family as well as on the entire society (Zhu et al., 2024).

Several studies comparing the quality of life of breast cancer survivors and general population suggest that the quality of life of the first group is lower (Batrićević & Kubiček, 2021, p. 633; Lee et al., 2011; Lee et al., 2012, p. 449; Schou et al., 2005 as cited in: Lee et al., 2012, p. 449). Moreover, there are studies indicating that breast cancer survivors experience numerous health issues several years following the treatment, particularly emphasizing that the deterioration of health-related quality of life during the first three years is more often detected among younger patients (Roine et al., 2021, p. 111). Although a study conducted by Roine and associates (2021) showed that five years post diagnosis health-related quality of life of younger breast cancer survivors upgraded and of older ones decreased, it stayed below the population level in both groups, which causes reasonable concern of survivors, their families and medical practitioners. Therefore, a profound and comprehensive insight in the factors that have an impact on the quality of life of cancer survivors appears to be rather useful, not only for individual patients, but also for health care policy makers (Annunziata et al., 2018, p. 651). This particularly refers to female breast cancer, primarily because of its increasing occurrence worldwide accompanied by gradual rise in survival rate, causing various treatment-related issues and complex changes on both – physical and mental level affecting the quality of patients' lives (Wang et al., 2024).

Even though resilience has been researched for decades by experts from diverse disciplines including psychiatry, psychology and sociology as well as neuroscience, endocrinology, genetics and epigenetics (Herrman et al., 2011, p. 259), a unique definition, concept and measurement of resilience have not been established (Vella & Pai, 2019). Depending on the author's standpoint, resilience can be defined either as a dependent or as an independent variable, related to individual's capacity for adaptive functioning under circumstances that are considered stressful or critical (Simancas Fernández et al., 2023). Resilience is usually described as individual's positive adaptation that occurs despite of substantial difficulties (Fletcher & Sarkar, 2013; Veličković et al., 2024). According to Cohler, this personality trait drives individuals to reach their goals, by developing appropriate behavioural patterns (Cohler, 1987 as cited in Simancas Fernández et al., 2023). In psychological sense, resilience refers to individual's capacity to preserve his/her mental health while facing difficulties such as, for example, the diagnosis of breast cancer (Ristevska-Dimitrovska et al., 2015, p. 727).

Resilience depends on a plethora of factors that may be influenced by various psychosocial interferences and is recognised as extremely significant in the context of breast cancer treatment and recovery (Veličković et al., 2024). Namely, as Simancas Fernández et al. (2023) emphasize, there are research findings suggesting that in the case of breast cancer patients' resilience represents a source of strength and a factor upon which their adjustment to the disease depends (Dooley et al., 2017; Liu et al., 2018; Tu et al., 2020). Therefore, it can be concluded that resilience as a variable significantly influences not only health but also the quality of breast cancer survivors' lives (Ristevska-Dimitrovska et al., 2015, p. 729; Simancas Fernández et al., 2023, p. 283). Namely, according to Ristevska-

Dimitrovska et al. (2015, p. 729), more resilient breast cancer patients tend to report less harsh symptoms (including nausea and vomitus, pain, dyspnea, insomnia, appetite loss, constipation and diarrhea), whereas less resilient ones seem to report worse body image and future perspective and experience stronger negative effects of systemic therapy and the loss of arm, breast and hair. However, the relationship between psychological resilience and quality of life should not be over-simplified, since there are numerous other complexly intertwined factors of psychological, social and medical character, that also have an impact on breast cancer patients' quality of life (Ristevska-Dimitrovska et al., 2015, p. 730).

Since psychosocial adaptation and resilience are considered central determinants of patients' quality of life (Wang et al., 2024), this study intents to explore its key aspects and their relationship among women who have been diagnosed with breast cancer and as well as to make suggestions for its improvement on individual and community level.

Method

Sample and Procedure

A cross-sectional study was conducted to examine the relationship between psychosocial adjustment to illness and resilience in women with breast cancer. The research took place in Serbia between September and October 2025 and represents a part of a larger project investigating psychosocial adjustment in individuals with various health conditions (e.g., inflammatory bowel disease, asthma, leukaemia, autoimmune liver diseases, and others).

The sample included 33 women aged 40–76 years (*M* = 55.82, *SD* = 8.35); 23 held a university degree and 10 completed secondary education. Data were collected via an online Google Forms survey, distributed through internal communication channels and official social media. Participants provided informed consent and completed standardized self-report measures of psychosocial adjustment to illness and resilience. Demographic data were also collected.

Participation was voluntary, and all responses were anonymous. The study procedures were conducted in accordance with the ethical principles outlined in the Declaration of Helsinki.

Measures

Psychosocial Adjustment to Illness

Psychosocial adjustment to illness was assessed using an adapted version of the Psychosocial Adjustment to Illness Scale – Self-Report (PAIS-SR; Derogatis, 1986). This instrument evaluates adaptation across seven life domains: healthcare orientation, vocational environment, domestic environment, sexual relationships, extended family relationships, social environment, and psychological distress. The sexual relationships subscale was omitted, as the study focused on domains most relevant to adaptation and well-being in individuals with chronic illness. Items were rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). In the current sample, the adapted PAIS-SR demonstrated good internal consistency, with Cronbach's alpha coefficients ranging from 0.55 to 0.95 across domains.

Resilience

Resilience was measured using the 25-item Resilience Scale (RS; Wagnild & Young, 1993), which captures key psychological strengths that characterize resilient individuals, such as equanimity, perseverance, self-reliance, meaningfulness, and existential aloneness. Participants rated each item on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). In this sample, the RS demonstrated excellent reliability (Cronbach's $\alpha = 0.95$).

Data Analysis

Analyses were conducted using IBM SPSS Statistics 22.0. Descriptive statistics summarized participants' demographics and study variables. Pearson correlations examined bivariate relationships and potential multicollinearity. A MANCOVA assessed the multivariate effect of resilience on psychosocial adjustment in women with BC, accounting for intercorrelations among outcomes and controlling for Type I error. Linear regression analyses further examined resilience as a predictor of psychosocial adjustment outcomes. Effect sizes were reported as partial eta squared (η^2_p) for MANCOVA and standardized beta coefficients (β) for regression. All tests were two-tailed, with $p < .05$ considered significant and 95% confidence intervals (CI) reported.

Results

Descriptive Statistics and Associations Among Variables

Participants reported moderate to high resilience (*M* = 3.69, *SD* = 0.74) and generally adaptive psychosocial adjustment across PAIS-SR subscales, with internal consistency ranging from $\alpha = .55$ to .95. Higher resilience was associated with better personal health care orientation, positive emotional responses, treatment comprehension, social and family support, and satisfaction with medical services.

No significant association was observed between resilience and physician-provided illness information, vocational environment, and extended family relationships, while resilience remained negatively related to psychological distress (Table 1).

Effects of Resilience on Psychosocial Adjustment to Illness

A MANCOVA examining the effect of resilience on psychosocial adjustment in women with breast cancer revealed a significant multivariate effect, Pillai's Trace = 0.66, $F(3, 21) = 3.78$, $p = .004$, $\eta^2_p = 0.66$ (Table 2).

Follow-up univariate analyses indicated that resilience had the largest effects on: Treatment comprehension (TC, $\eta^2_p = 0.32$, $p = .001$), Social environment (SE, $\eta^2_p = 0.31$, $p = .001$), and Psychological distress (PD, $\eta^2_p = 0.21$, $p = .007$) (Table 3).

Table 1

Descriptive statistics and associations among variables

Variables	*M* (*SD*)	α	2	3	4	5	6	7	8	9	10	11	12
PAIS-SR													
1. PHCO	3.98 (.83)	.78	$.70^{**}$	$.40^{*}$	$.47^{**}$	-.03	$.36^{*}$	.24	.20	-.09	.24	.09	$.41^{*}$
2. IRB	3.64 (.96)	.55		.34	$.49^{*}$	-.10	.34	.14	-.23	-.17	.32	-.03	$.35^{*}$
3. SMC	3.20 (.84)	.78			$.43^{**}$	$-.55^{**}$	$.56^{**}$	-.12	$.41^{*}$	-.09	.24	-.10	$.36^{*}$
4. ERHR	3.65 (.92)	.74				-.40*	$.62^{**}$	-.00	.22	-.06	.16	-.29	$.35^{*}$
5. PPI	3.17 (.87)	.73					$-.59^{**}$	.08	-.30	-.19	$-.40^{*}$	$.36^{*}$	-.29
6. TC	3.77 (.92)	.75						.17	.29	.03	$.39^{*}$	$-.39^{*}$	$.56^{**}$
7. VE	3.60 1.00)	.69							$-.46^{**}$	.10	.02	.05	.31
8. DE	3.20 (.76)	.61								.15	$.51^{*}$	-.28	$.38^{*}$
9. EFR	2.78 (.83)	.62									.20	$-.38^{*}$	.08
10. SE	3.51 (1.28)	.95										$-.41^{*}$	$.56^{**}$
11. PD	3.12 (1.17)	.90											$-.46^{**}$
12. RS	3.69 (.90)	.95											

Note. $^{*}p < .05$; $^{**}p < .01$; PAIS-SR = Psychosocial Adjustment Scale-Self Report; PHCO = Personal health care orientation; IRB = Illness-related behavior; SMC = Satisfaction with medical care; EAHR = Emotional response and hope for recovery; PPI = Physician-provided information; TC = Treatment comprehension; VE = Vocational environment; DE = Domestic environment; EFR = Extended family relationships; SE = Social environment; PD = Psychological distress; RS = Resilience.

Table 2

Multivariate effect of resilience on psychosocial adjustment to illness in women with BC

Effect		Values	*F*	*df*	*p*	Eta Coefficient
Resilience	Pillai's Trace	.66	3.78	21	.004	.664
	Wilks' Lambda	.34	3.78	21	.004	.664
	Hotelling's Trace	1.98	3.78	21	.004	.664
	Roy's Largest Root	1.98	3.78	21	.004	.664

Table 3

Univariate effects of resilience on indicators of psychosocial adjustment to illness

	Variables	*df*	*F*	*P*	η^2_p
Resilience	PHCO	1	6:28	.02	.17
	IRB	1	4:39	.04	.12
	SMC	1	4.72	.04	.13
	ERHR	1	4.42	.04	.13
	PPI	1	2.81	.10	.08
	TC	1	14.49	.001	.32
	VE	1	3.26	.08	.10
	DE	1	5.29	.03	.15
	EFR	1	.20	.07	.01
	SE	1	14.20	.001	.31
	PD	1	8.42	.007	.21

Note. PHCO = Personal health care orientation; IRB = Illness-related behavior; SMC = Satisfaction with medical care; EAHR = Emotional response and hope for recovery; PPI = Physician-provided information; TC = Treatment comprehension; VE = Vocational environment; DE = Domestic environment; EFR = Extended family relationships; SE = Social environment; PD = Psychological distress.

Predictive Effects of Resilience on Psychosocial Adjustment to Illness Indicators

Linear regression analyses were conducted to examine the predictive role of resilience on psychosocial adjustment indicators in women with breast cancer. Higher resilience significantly predicted greater Treatment comprehension (TC, $\beta = 0.56$, $p = .001$, $R^2 = 0.32$) and Social environment (SE, $\beta = 0.56$, $p = .001$, $R^2 = 0.31$), followed by Psychological distress (*PD*, $\beta = -0.46$, $p = .007$, $R^2 = 0.21$), Personal health care orientation (PHCO, $\beta = 0.41$, $p = .03$, $R^2 = 0.17$), Domestic environment (DE, $\beta = 0.38$, $p = .03$, $R^2 = 0.15$), Emotional response and hope for recovery (ERHR, $\beta = 0.36$, p

= .04, $R^2 = 0.13$), Illness-related behavior (IRB, $\beta = 0.35$, $p = .04$, $R^2 = 0.12$), and finally Satisfaction with medical care (SMC, $\beta = 0.26$, $p = .04$, $R^2 = 0.13$). These results indicate that resilience is a particularly strong predictor of cognitive and social aspects of psychosocial adjustment, as well as psychological well-being (see Table 4).

Table 4

Predictive effects of resilience on psychosocial adjustment to illness indicators

Dependent variable	β	*t*	*p*	R^2
PHCO	.41	2.51	.03	.17
IRB	.35	2.10	.04	.12
SMC	.26	2.17	.04	.13
ERHR	.36	2.10	.04	.13
TC	.56	3.81	.001	.32
DE	.38	2.30	.03	.15
SE	.56	3.77	.001	.31
PD	-.46	-2.90	.007	.21

Note. PHCO = Personal health care orientation; IRB = Illness-related behavior; SMC = Satisfaction with medical care; EAHR = Emotional response and hope for recovery; TC = Treatment comprehension; Domestic environment; SE = Social environment; PD = Psychological distress.

Discussion

The findings of the present study suggest that the participants exhibit generally adaptive psychosocial adjustment and moderate to high levels of resilience. The fact that participants of this research registered moderate to high resilience indicates that they managed to handle breast cancer diagnosis, the disease itself as well as the treatments’ side effects and the change of their lifestyle in the way that enhances their protection (compare with: Simancas Fernández et al., 2023, p. 283). In this case, moderate to high resilience is positively related to better personal health care orientation, positive emotional response, treatment comprehension, social and family support, satisfaction with medical services.

Personal Health Care Orientation

An individual-differences concept of health orientation represents a person's readiness to embrace healthy attitudes and beliefs as well as to participate in healthy behaviours (Togas & Parlalis, 2021). Being health-oriented comprises having a positive attitude about preventive behaviours and healthy activities (Dutta-Bergman, 2005; Lee et al., 2021; Togas & Parlalis, 2021), which can be observed an aspect of self-care, defined in the broader sense as a process of health maintenance that consists of activities directed towards health promotion, treatment adherence, as well as signs and symptoms monitoring and managing (Jin et al., 2022; Riegel et al., 2012). The relationship between resilience and self-care appears to expand in two directions, which means that self-care interventions ameliorate resilience, on the one hand, whereas resilience interventions tend to enhance self-care outcomes on the other (Jin et al., 2022).

The results of this research demonstrate that breast cancer survivors tend to practice better personal health care in comparison to their life pre-diagnosis. Better personal health care orientation of breast cancer survivors is also confirmed by a case study conducted by Batrićević and Kubiček (2021) showing that the experience of this disease may inspire women to make some radical positive changes in their daily lives, such as saving more time for leisure activities, setting their own priorities, putting themselves on the first place and taking more care of their own health (Batrićević & Kubiček, 2021, p. 648). Also, Veličković and associates confirm that breast cancer patients with higher resilience expressed a stronger sense of agency and control when it comes to taking care of their own physical and mental health, including making decisions about the treatment and attempting to improve their wellbeing during treatment through practicing hobbies and physical activity (Veličković et al., 2024). On the other hand, the same study suggests that patients with lower resilience took a more passive role in the treatment process, predominantly relying on medical staff and closer relatives (Veličković et al., 2024).

Positive Emotional Response

This research confirms that breast cancer patients' positive emotional response to the diagnosis, and treatment is in positive correlation with their resilience and adaptation to disease. Positive emotional response embraces an optimistic approach to the situation, instigating actions that are proactive and directed towards health promotion as well as stress and risk factors' minimization, all of which seems to make a positive impact on quality of life, disease adaptation and post-traumatic growth of breast cancer patients (Bellur et al., 2018; Segerstrom et al., 1998; Simancas Fernández, 2023, p. 282). Previous studies recognised positivity and strength as elements that establish breast cancer survivors' resilience

(Pieters, 2016; Zhang et al., 2018; Veličković et al., 2024). A photovoice research conducted by Erden and associates also confirmed that: “The majority of participants exhibited self-acceptance and a hopeful perspective, confident in their ability to recover” (Erden et al., 2025, p. 10). As Erden et al. (2025) state, their results are in accordance with a study that emphasized the transition of cancer patients from initial denial of the disease to readiness, confident attitude towards treatment and faith in positive outcome.

Treatment Comprehension

Our research also indicates that treatment comprehension on the behalf of breast cancer patients appears to be a significant variable in positive relation to their resilience. Similar findings have been presented by Simancas Fernández and associates (Simancas Fernández et al., 2023) claiming that breast cancer patients who understand their diagnosis and its implications respond to the disease in a way that is resilient and optimistic.

Satisfaction with Medical Services

Satisfaction with medical services is another variable in positive correlation with breast cancer patients’ resilience and adaptation to disease. It seems to depend on various circumstances and may refer to diagnosis, treatment, surgery, aesthetical interventions and follow up care.

One of the elements of patient’s satisfaction with medical services refers to providing the patient with relevant information (Thind et al., 2011). Providing patients with clear medical information and explaining treatment results with clarity is positively associated with their satisfaction in several studies (Napoles et al., 2009; Rahmqvist & Bara, 2010; Thind et al., 2011).

On the other hand, lower level of satisfaction with medical care among cancer survivors in general, including breast cancer survivors as well, appears to be rooted in unmet needs (Gaspar et al., 2025). According to Abdelsalam and Bayomi (2022), the highest level of unmet needs in the psychological sphere emerges among breast cancer survivors, which suggests that individualised approach and stronger networks of social and psychological support for this particular group of patients should be developed or, if they already exist, strengthened and improved (Abdelsalam & Bayomi, 2022; Gaspar et al., 2025).

When discussing patients’ satisfaction with medical services, one should also consider the specific situation of breast cancer patients in the case of breast conserving therapy, which represents a standard for early phase of this disease. As Waljee et al. (2008) highlight, breast asymmetry, that may occur after this kind of intervention is significantly correlated with patients’ dissatisfaction with the treatment and loss of trust in surgeons.

Social and Family Support

Besides the support provided by medical staff throughout the process of diagnoses, treatment and recovery, which is highly valued by the patients (Capewell et al., 2020, p. 1320), the support of community, including family, neighbours, friends and colleagues is considered very important for women experiencing breast cancer (Batrićević & Kubiček, 2021, p. 646). As Veličković et al. (2024) claim, the role of other persons (such as family, friends, medical staff and other women who have experienced breast cancer) in the aforementioned process is not only important but rather complex as well. Although emotional and practical support of family, friends and the sense of community with other breast cancer survivors appears to be pretty helpful, particularly for women with lower resilience, one should have in mind the fact that patients with previous experience of breast cancer within their family may feel additional burden and concern (Veličković et al., 2024). Also, in the research conducted by Batrićević and Kubiček (2021), most of the participants agreed that they received the greatest support from the members of their families throughout the entire process, but they emphasized the fact that each family member provided them with different kind of support as well as that in some situations that support did not appear to be as helpful as it was intended to be (Batrićević & Kubiček, 2021, p. 646). That might be the reason why peer support is highly appreciated by women who have been through the experience of breast cancer. As Capewell and associates stress, talking to other women who have passed through the same experience is considered rather beneficial, particularly if they were trained to provide peer support (Capewell et al., 2020, p. 1321).

Psychological Distress

The results of this research are in harmony with previous findings regarding this topic, affirming that resilience is negatively related to psychological distress. Apart from the obvious reasons such as the life-threatening character of the disease, there are several additional factors contributing to psychological distress of breast cancer survivors. As Erden and associates highlight, temporary loss of hair due to chemotherapy and permanent loss of one or both breasts as the symbols of feminine identity may cause a change in woman's identity, deepen the feelings of mourning and sorrow and cause strong emotional distress (Erden et al., 2025). This is of particular importance since, according to Falafas and associates, there are indications that depression and emotional constraint might be related to decreased survival rate of breast cancer patients (Falagas et al., 2007). The hair eventually grows back, but long-term consequences of body shape alterations due to surgery remain, and so does the tattoo placed on patient's chest for the purpose of radiotherapy, constantly reminding them of potential relapse (Capewell et al., 2020, p. 1320). Therefore, the distress of breast cancer survivors is very likely to continue after the treatments are over, predominantly due to the nature of the disease. It cannot be estimated with cert whether a person has been cured from cancer since the relapse may occur after several years, which causes the feeling of uncertainty and deters the survivors from moving on (Veličković et al., 2024). Regular medical check-ups (occurring semi-annually at first and annually later on) are necessary and they require patients' engagement, potentially causing financial expenses and constantly amplifying fear, anxiety and uncertainty (Batrićević & Kubiček, 2021, p. 637).

According to Veličković and associates, the loss of control caused by the fact that patients do not have agency over their diagnosis and the incidence of relapse seems to be key amplifier of distress and anxiety, regardless of the level of patient's resilience (Veličković et al., 2024). A similar conclusion is drawn in a photovoice research conducted by Capewell and associates, who argued that due to transferring the decision-making to others, female breast cancer patients felt as if control over their lives was taken away from them (Capewell et al., 2020, p. 1320). This lack of control changes the way in which women perceive their own identity and amplifies the feeling of anxiety, which might threaten patient's response to treatment (Capewell et al., 2020, p. 1320). Therefore, it can be claimed that the sense of losing control, felt by breast cancer patients, may influence the adaptation to the disease to be lower, even in the cases of highly resilient patients. At this point, a comparison could be made between breast cancer patients and patients suffering from inflammatory bowel disease, who participated in research conducted by the authors of this paper in November, 2025. Namely, the findings of the aforementioned research indicate that patients with inflammatory bowel disease more easily adapt to their disease in comparison to breast cancer patients, which can be attributed to the fact that, unlike cancer, inflammatory bowel disease is not necessarily life-threatening, although it may seriously affect the quality of life.

Conclusion

The finding that psychosocial adjustment and resilience in our study remain at a moderate level suggests that women with breast cancer maintain functional capacity while continuously facing health-related, psychological, and social challenges. This is particularly evident in the domains of health care management, family relationships, and psychological distress. Therefore, the complexity of the aftermaths of breast cancer in the fields of physical and mental health, emotional wellbeing, social interactions, financial status and family relations requires a holistic approach not only to its medical treatment but also to its overall perception and understanding on individual and public level (Batrićević & Kubiček, 2021, p. 649). This underscores the need not only for comprehensive assessment and understanding, but also for the development of individualized support approaches and tailored intervention strategies.

Limitations

Nevertheless, the findings of the present study should be interpreted in light of several limitations. Although the data demonstrated a normal distribution and therefore did not necessitate the use of nonparametric methods, the relatively small sample size may limit the robustness and generalizability of the results, and the regression analyses may reflect a degree of methodological instability. In addition, the cross-sectional study design precludes causal inference and further constrains the generalization of the findings. The reliance on self-report measures also introduces the possibility of socially desirable responding. Moreover, the use of general resilience instruments, rather than disease-specific measures, may have limited the sensitivity of the assessment to capture resilience processes unique to the studied clinical population.

The instruments applied in this research have not been previously validated in national (domestic) context. When interpreting the results of this research, this methodological limitation should be taken into consideration.

Despite these limitations, the findings provide valuable preliminary insights into the examined constructs and their interrelationships and may serve as a foundation for future studies employing larger samples, longitudinal designs, and mixed-method approaches.

Ethical Approval

Informed consent has been obtained from all individuals included in this study. The research related to human use has been compiled with all the relevant national regulations, and in accordance with the tenets of the Helsinki Declaration.

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Psihosocijalna adaptacija i kvalitet života žena koje su preživele rak dojke∗

Violeta Tadić & Ana Batrićević

Institut za kriminološka i sociološka istraživanja, Beograd, Srbija

Žene obolele od raka dojke se suočavaju sa brojnim izazovima, ne samo u oblasti fizičkog zdravlja, već i u sferi mentalnog blagostanja. Njihova psihosocijalna adaptacija se odvija pod kontinuiranim zdravstvenim, psihološko-emocionalnim i socijalnim pritiscima. Cilj ovog istraživanja bio je da ispita psihosocijalnu adaptaciju i rezilijentnost na uzorku žena obolelih od raka dojke, primenom skale Psihološkog prilagođavanja na bolest (PAIS-SR) i skale Rezilijentnosti (RS). Uzorak je sačinjen od 33 žene starosti između 40 i 76 godina (M = 55.82, SD = 8.35). Podaci su analizirani primenom deskriptivnih i multivarijantnih statističkih metoda. Rezultati ukazuju na generalno adaptivno psihološko prilagođavanje zajedno sa umerenim do visokim nivoima rezilijentnosti. Viši stepen rezilijentnosti je u pozitivnoj korelaciji sa boljom ličnom zdravstvenom orijentacijom, pozitivnijim emocionalnim odgovorima, potpunijim razumevanjem tretmana, snažnijom socijalnom i porodičnom podrškom i višim stepenom zadovoljstva sa medicinskim uslugama. Nalazi ovog istraživanja podvlače postojanje potrebe za holističkim pristupima koji integrišu psihosocijalnu podršku u medicinsku negu. Buduća istraživanja trebalo bi da se nadovezuju na ove nalaze, uz uključivanje većih uzoraka, longitudinalnih nacrta i multimetodskih pristupa kako bi se omogućio razvoj individualnih modela podrške i strategija intervencije prilagođenih potrebama pacijenata.

Ključne reči: rak dojke / rezilijentnost / psihosocijalna adaptacija / podrška porodice / kvalitet života

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