

THE NEXUS BETWEEN SOCIAL SUPPORT, COPING AND PSYCHOLOGICAL WELL-BEING OF BREAST CANCER PATIENTS IN PUNJAB, PAKISTAN

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KEYWORDS	ABSTRACT
Breast Cancer, Social Support, Coping and Psychological Well-Being, Breast Cancer, Pakistan  ARTICLE HISTORY  Date of Submission: 20-04-2025 Date of Acceptance: 23-05-2025 Date of Publication: 25-05-2025	Breast cancer has physical and psychological effects on both patients and their families. The cancer is a life-threatening disease and breast cancer is most prevalent form of it. Despite significant advancements in the medical technology that have improved the treatment outcomes, the psychological consequences still remain ignored. This study aims to explore role of social and cultural factors that affect coping mechanisms employed by cancer survivors & their social support systems. This study employed quantitative research design and collected data from 325 breast cancer patients over purposive and convenient sampling techniques. The results revealed that socio-economic factors, including the age, income, and family size, have a significant impact on psychological well-being of patients. The results also narrated that older age & patients from higher family income have better emotional stability. The findings showed that strong and efficient systems of support influenced the coping with the challenges associated with the disease. Likewise, the study also provides new insights into this important relationship and advocates for comprehensive approach that incorporates the socio-cultural understanding to address the psychological well-being of the survivors.
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#### INTRODUCTION

Millions of women and their families are affected by breast cancer, and the rising number of cases makes it a serious public health threat. The diagnosis and treatment process are accompanied by numerous physical and psychological challenges for patients. Although advancements in medical science have increased survival rates & offered various treatment options for breast cancer patients,

emotional health of many survivors continues to be overlooked (Harbeck, Penault, Cortés, Ruddy, Poortmans, Tsang & Cardoso, 2019). The physical effects of disease are visible in patients; however, its profound impact upon mental health causes an ongoing struggle with existential crisis, low selfesteem, fear of recurrence, and various other psychological challenges (Maheswari & Raju, 2020; Purkayastha, Venkateswaran, Nayar & Unnikrishnan, 2017). These psychological issues can have a significant impact on an individual's well-being and may influence treatment outcomes. Thus, it is vital to design active support interventions that strengthen social support networks and address the key factors affecting patients' psychological health (Fortin, Leblanc & Elgbeili, 2021). The research has highlighted critical role of social support in reducing the psychological burden experienced by breast cancer patients.

# Objectives of Study

- 1. To examine the effects of social support upon breast cancer patients in the particular context.
- 2. To identify effective support mechanisms to reduce the psychological & enhance well-being.

#### LITERATURE REVIEW

Chronic diseases are those that are prolonged, whose treatment takes time, and sometimes they are not completely cured. According to Bogdan and Gherasim (2018), chronic diseases interfere with development of adolescents and make them more prone to psychological and social development problems. It's a time that is characterized by a strong concern for the physical look of the body. The change caused by any chronic disease in the physical appearance of the patient can influence their self-concept and body image. This self-concept development leads to many difficulties in the social, sexual, and psychological well-being of patients. Psychological adjustment is very important for psychological well-being. It is a multidimensional phenomenon which needs adaptation to disease, have better functional status and better quality of life with no emotional disorder and any negative affect (Wong, Noah, & Ismail, 2018). Social support is basically support from family members, peers' groups and healthcare providers that offer instrumental, emotional, and informal assistance during the time of illness. Many previous studies revealed that having a strong support system throughout the cancer journey promotes emotional resilience and improved the psychological well-being in the survivors (Hinzey, Diaz & Lustberg, 2016; Salakari, Pylkkänen, Nurminen, Rautava, Koskenvuo & Suominen, 2017).

The current research study determines the best support mechanisms that can lead to alleviation of psychological suffering to improve the general psychological well-being of breast cancer patients. Various coping strategies are used by people to handle the stress, adapt to novel circumstances, and keep their emotional stability (Kim, Han, Shaw, McTavish & Gustafson, 2010). A cancer diagnosis, the unpleasant side effects of treatment and the unknown variables of a remission and a recurrence can led patient to have emotions that fly out of control. Healthcare professionals need to determine that how effective various coping methods are to empower them to implement the right support and interventions to the patients who are fighting breast cancer (Fortin, Leblanc, Elgbeili, 2021). The prevalence of sleep disruptions, depression (with 30% having mild and 14.2% having moderate to severe depression), and a favorable association between depression and sleep quality were all noted in a study on breast cancer patients following surgery and chemotherapy. Age, number of children,

income, duration of sleep, latency, and type of surgery were all associated with depression (Hinzey, Diaz & Lustberg, 2016). Poor sleep quality and depression were also found to have weakly positive link in the study.

Table 1 Conceptual Framework

Background	Independent	Dependent
Age	Coping	
Occupation	Emotion-focused coping	Psychological
Marital status	Problem-focused coping	Well-being
Income	Religious coping	· ·
Family size	Social Support	
Type of treatment	Instrumental support (HC Services + professionals)	
Education	Appraisal support	
Family type	Emotional support	
Residential area	Informational support	
Age at diagnosis		

## Research Hypotheses

- H1: Socio-economic variables has significant effect on psychological well-being of patients.
- H2: Better coping with the disease increased the psychological well-being of cancer patients.
- H3: More social support will lead toward better psychological well-being in cancer patients.

#### RESEARCH METHODOLOGY

In this study, we utilized a quantitative research design to inquire into connection between coping methods and breast cancer patients' emotional health. The study used the validated psychological instruments to gauge resilience and emotional health. Patients with breast cancer were selected from variety of treatment facilities using purposive sampling strategy. The participants filled out a series of self-reported questionnaires as measured well-being. Analysis of data included regression and correlation tests to investigate possible links between different types of coping and different aspects of mental health. Coping Insights into coping strategies used by breast cancer patients and effect on psychological well-being were gained over rigorous application of quantitative research design, providing useful empirical evidence to inform supportive interventions and improve quality of life for these patients.

#### **RESULTS OF STUDY**

This table depicts that the majority of breast cancer patients in study were in age ranges of 40–50 (31.4%), 29–39 (35.4%), indicating that disease affects people of all ages. A sizable portion (30.8%) had a low level of education, emphasizing the necessity of effective communication techniques. The majority were housewives (87.4%), while 5.5% of them worked for the government. The majority of patients (61.5%) were married, suggesting possible access to emotional support. The (66.8%) had a family income of amid 14,000 and 30,000, would indicate worries in affording therapy. The majority of families were nuclear families (48.3%), may have an impact on social networks. These findings

climax how various socioeconomic backgrounds of breast cancer patients affect their experiences and general well-being.

Table 2 Socio-economic attributes of respondents

Age	N(%)	Education	N(%)	Occupation	N(%)
29-39	115(35.4)	Illiterate	100(30.8)	Housewife	284(87.4)
40-50	102(31.4)	Primary-Middle	97(29.8)	Gov't Employee	18(5.5)
above 50	71(21.8)	Matric –Intermediate	92(28.3)	Private Employ	10(3.1)
Marital Status	N (%)	b.a –m.a	36(11.1)	Businesswoman	13(4.0)
Unmarried	47(14.5)	Above Masters	O(O	Family Type	N(%)
Married	200(61.5)	Family Income	N(%)	Nuclear	157(48.3)
Divorced	14(4.3)	14~30000	217(66.8)	Joint	122(37.5)
		31-46000	67(20.6)	Extended	46(14.2)
		47000-63000	30(9.2)		_

## Hypotheses Testing

Table 3 Chi-Square and Gamma Values showing Variables' Relationship

Socio-economic Variables	Statistics	P-value	Gamma value	Significant
Age	$\chi 2 = 29.50$	.000**	0.235	.012*
Education	$\chi 2 = 23.32$	.001**	-0.170	.070NS
Family Income	$\chi 2 = 46.08$	.000**	0.493	.000**
family size	$\chi 2 = 12.75$	.047*	0.231	.010*
Family type	$\chi 2 = 2.99$	.559NS	0.091	.346NS

The analysis of socio-economic variables in relation to well-being revealed intriguing insights into the experiences of participants. Age was found to have a highly significant association with well-being ( $\chi 2 = 29.50$ , p =  $.000^{**}$ ), with older individuals displaying slightly higher levels of well-being compared to their younger counterparts. This suggests that as individuals progress over different life stages, they may develop better coping mechanisms or experience greater sense of contentment, contributing to higher well-being. Education, while showing a significant relationship with well-being ( $\chi 2 = 23.32$ , p =  $.001^{**}$ ), displayed a weak negative correlation with a gamma value of -0.170. This intriguing result suggests that higher education might not necessarily translate to higher levels of well-being among the participants. The non-significant p-value (p = .070NS) indicates that this finding be interpreted with caution and warrants further exploration. It could be that other factors, like social support, personal values, or life circumstances, may interact with education to influence well-being outcomes.

The family income emerged as a powerful predictor of well–being, displaying a highly significant relationship ( $\chi 2 = 46.08$ , p =  $.000^{**}$ ) with a strong positive correlation (gamma value of 0.493), the individuals from families with higher income levels tended to show greater well–being, potentially due to increased access to resources, better healthcare, and improved overall living conditions. The findings underscore the crucial role of financial stability in shaping the individuals' emotional and

psychological states. Family size was associated with well-being ( $\chi 2$  = 12.75, p = .047\*). Participants from larger families reported slightly higher well-being, suggesting that being part of larger social unit may contribute positively to one's emotional state. The moderate positive correlation (gamma value of 0.231) highlights the potential benefits of familial support and interpersonal relationships within larger families.

On other hand, family type did not exhibit a significant relationship with well-being ( $\chi 2 = 2.99$ , p = .559NS). The gamma value of 0.091 indicates weak positive correlation, suggesting that different family structures may not substantially impact individuals' well-being. However, non-significant p-value implies that the relationship is not statistically robust and requires further investigation. In conclusion, the analysis of socio-economic variables in relation to well-being revealed age, family income, and family size as significant factors influencing participants' psychological state. Older age, higher family income, and larger family size were associated with higher levels of well-being. Though, relationship between education and family type with well-being appeared more nuanced and needs further exploration. These findings contribute valuable insights to understanding the complex interplay amid socio-economic factors and well-being, potentially guiding development of tailored support strategies to promote overall emotional health and quality of life for individuals (Sorensen et al., 2020).

Table 4 Chi-Square & Gamma Values Showing Relationship

Variables	Statistics	P-value	Gamma value	Significant
Coping	$\chi 2 = 9.53$	.049*	0.307	.002**
Social Support	$\chi 2 = 34.24$	.000**	0.210	.038*

The statistical analysis revealed significant findings regarding the relationship between the coping strategies, social support, and their impact upon well-being of participants. For the coping variable, the Chi-square test indicated a significant association with the well-being of breast cancer patients ( $\chi 2 = 9.53$ , p =  $.049^{\circ}$ ). The data results showed the moderate positive correlation (Gamma = 0.307) between coping strategies and psychological well-being of survivors which indicated that patients who adopt adaptive and real mechanisms of coping had psychological well-being competitively to other patients. Another result of the chi-square test ( $\chi^2 = 34.24$ , p =  $.000^{\circ}$ ) revealed a significant association amid social support and psychological well-being among breast cancer patients. The gamma coefficient of 0.210 narrated a moderate positive correlation that indicating patients who had greater support from social networks were likely to had better psychological well-being. These findings highlight the importance of social support as factor that improves the emotional health of the cancer patients.

The psychological well-being of breast cancer patients relied on two strong factors social support and coping. The findings revealed that psychological well-being had significant association with coping ( $p = .002^{**}$ ) and social support ( $p = .038^{*}$ ). The findings also narrated those effective coping strategies and having multiple social support enhanced the psychological well-being of survivors. A comprehensive care plan that addresses both emotional resilience and social relations during the cancer treatment is required to achieve better results in the treatment. According to these findings,

maintaining a strong social network and developing effective coping strategies are very important for breast cancer patients. Specific context–based interventions that boost psychological resilience amid survivors and inspire supportive relationships lead to better quality of life and psychological well–being. These aspects are essential to address with more holistic approach that is beyond the medical treatment alone.

### Multivariate Analysis

Table 5 Estimation of Standard Deviation

	Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of Estimate		
2	.655a	.429	.416	.407		

Table 6 Results Of ANOVA

			ANOVA			
	Model	Sum of Squares	Df	Mean Square	F	Sig.
2	Regression	39.439	7	5.634	33.98	d000.
	Residual	52.561	317	.166		
	Total	92.000	324			

Table 7 Coefficients of Regression Analysis

			Coefficient	:s		
Model		Unstai	Unstandardized		t	Sig.
		Coel	ficients	Coefficients		
		В	Std. Error	Beta		
2	(Constant)	1.351	.080		16.956	.000**
	Age	.120	.048	.213	2.492	.013*
	Education	428	.054	~.803	-7.934	.000**
	Family size	.005	.074	.009	.072	.943NS
	Family type	<i>-</i> .114	.075	153	-1.532	.126NS
	Income	.303	.063	.411	4.786	.000**
	Social support	.164	.054	.200	3.057	.002**
	Coping	.352	.061	.411	5.803	.000**
a. Pre	dictors: Coping, Incon	ne, Social Supp	ort, Education, A	Age, Family Type, Fa	ımily Size	

b. Dependent Variable: Psychological well-being

Multiple regression analysis was conducted to explore the influence of socio-cultural factors on the psychological well-being of cancer patients. The model's overall significance was assessed using R2, adjusted R2, and an F-test. The values obtained were R2 = 0.429, adjusted R2 = 0.416, and F-test = 33.98. The R2 value indicated that approximately 43 percent of the total variation in psychological well-being can be explained by the seven explanatory variables included in the model. As the primary data was used, this high estimated value signifies the model's reliability in predicting the psychological well-being based on the selected variables. The F-test, with a calculated value of 33.98, was statistically significant at a significance level of less than one percent, further supporting

model's overall reliability and effectiveness in explaining the dependent variable. In this regression model, the dependent variable is psychological well-being, and seven explanatory variables were considered. Among them, four variables showed a positive impact on the psychological well-being, while one variable had a negative and significant effect, and two variables were found to be non-significant in the study.

Specifically, respondents' age, family income, social support, and coping demonstrated statistically significant positive relationships with psychological well-being, indicating that older age, higher family income, stronger social support, and effective coping mechanisms were associated with the higher levels of psychological well-being among cancer patients. On the other hand, education was found to be in inverse relation with psychological wellbeing. It shows that an educated patient may have understood the repercussions of their cancer diagnosis to a higher degree than an ill-educated patient and hence experience the lower psychological well-being states as compared to an ill-educated eminent. Findings indicate that age, family income, education, coping mechanisms, and social support are crucial aspects to the psychological well-being of cancer patients. These are factors that determine the emotional adaptation of people to stress accompanying diagnosis and treatment. Therefore, support programs and interventions must take into consideration such factors and should be aimed at the betterment of mental health in patients. Making survivors more comfortable in coping with the emotional and practical aspects of the process of living with their disease is also necessary.

#### DISCUSSION

This research aims to analyze the relationship between socioeconomic conditions, coping strategies and social support with the psychological well-being of the breast cancer survivors. To identify this relationship different statistical tools supported in chi-square, gamma and regression analysis were included. Chi-square test was used to examine the association between the variables and Gamma coefficient explained direction and strength of relationship between independent and dependent variables. The patterns revealed in findings supported the previous research. These findings offer a strong basis to design interventions based on medical and emotional needs of patients because it's evident through data that effective coping mechanism and strong social support networks make a eloquent difference in lives of survivors. This study confirms previous studies (Zamanian et al., 2020; Ośmiałowska et al., 2021), that proved strong correlation in coping strategies and psychological well-being. The adequacy of this relationship was statistically verified by Chi-square test (2=9.53, p=0.49), showed that those who implemented better coping plans were inclined to report "better" psychological well-being.

These findings also highlight the importance of enhancing coping skills among patients as part of comprehensive psychological intervention in the illness. These findings also aligned with one other study upon the factors associated with the mental health (Velasco et al., 2020). The strength of this relationship was also confirmed by the value of the Gamma ( $\gamma = 0.307$ ,  $p = .002^{**}$ ), which revealed that coping and psychological well-being had a moderate and statistically significant and positive relationship. Thus, these results add to the existing literature regarding the essentiality of coping strategies in determining the mental health status of individuals (Fasano et al., 2020; Tu, Yeh, &

Hsieh, 2020). Moreover, the research concerning social support in the given study correlates with other studies that have repeatedly emphasized their substantial role in enhancing psychological well-being (Zamanian et al., 2020; Adam & Koranteng, 2020; Aprilianto, Lumadi, & Handian, 2021). Cumulatively, this evidence indicates that further interventions are needed to enhance the coping abilities as well as supportive social contexts to enable the patients to exhibit good mental health and resilience.

Chi–square test result ( $\chi^2 = 34.24$ , p = .001) indicated a powerful and significant correlation between social support and psychological well–being. The Gamma index ( $\gamma = 0.210$ ,  $p = .038^*$ ) was also used to establish a moderate positive relationship which further supports the argument that the quantity and quality of social support person receives is significant in mental health. The findings correspond with earlier studies, including the one conducted by the Janowski et al. (2020) who highlighted the preventative effects of social support to stimulate psychological well–being and provide resilience against emotional distress moderate, statistically significant and positive relationship. The multiple regression analysis has shown that socio–cultural issues play a significant role in the psychological well–being of breast cancer patients. The R2 of model (0.429) shows that variation in psychological well–being is about 43 percent and that the chosen explanatory variables can explain it. It means that the model is successful in exploring the multidimensionality of the emotional reactions of the patients as these issues exist deep in their minds tend to affect their mental health in the process of cancer experience.

These findings also indicated that sociocultural factors influenced the psychological well-being of cancer survivors. It aligned with the previous study on the emotional responses of cancer patients towards the disease (Benson et al., 2020). Socio cultural variables such as age, family income, social support, and coping strategies play the pivotal role in alleviating the emotional distress associated with a cancer diagnosis. The findings of this study confirm that older patients tend to report higher levels of psychological well-being compared to younger counterparts. Such trends be connected to life experience that they have gained, more resilience and abilities to overcome adversity with better coping tactics (Luszczynska et al., 2009). These findings correspond to those of other studies that highlight the multidimensional effect of a person and context on the psychological outcomes of cancer patients (Benson et al., 2020). Always, enhanced psychological well-being among cancer patients may be associated with increased family income since patients may have increased access to high-quality healthcare services, support services, other resources that minimize illness burdens (Zhang et al., 2021).

Further, the strongest protective measure was social support that led to the decline of psychological burden of cancer-related stress significantly and allowed patients to gain control over emotions and adapt (Widyaningsih & Istifaraswati, 2020). Passable coping ability, especially in accordance with problem-solving skills and emotional control, is undeniably essential in empowering cancer patients to tolerate not only psychological stresses associated with a disease, but also the associated treatment program (Movahedi, Khani, Hasani, & Moghadasin, 2019). One interesting observation evident in this research is negative relationship between education and psychological well-being; an observation that is contrary to previous assumptions. These findings suggest that most educated

patients can be emotionally distressed as a result of increased awareness of the consequences of the disease and its treatment (Hwang et al., 2020). Knowledge like this demonstrates the need to offer tailored psychological counseling and support services that directly respond to the concerns of the highly educated patients thus acknowledging the complicated emotional environment in which they have to move.

The findings show that considering socio-cultural determinants has effect upon psychological well-being, but experiences of cancer patients be seen as multidimensional and shaped by individual characteristics and by broader contextual issues. The reaction towards cancer is not homogeneous at all, it varies by individual personality, cultural, and social context. These results add to the existing literature regarding the essentiality of coping strategies in determining the mental health status of individuals Thus, it is recommended that further studies address other aspects, such as personality traits, cultural belief systems, and spiritual practices, to develop a more holistic perspective on the well-being of a patient. This study highlights overwhelming effects of socio-cultural factors such as age, family income, educational level, coping ability and social support on the mental health of a cancer patient. This gives further support to the need to have controlled interventions and psychosocial support practices that depending on the individual characteristics of the person through the cancer trajectory.

#### CONCLUSION

The current investigation supports the crucial role played by coping strategies and social support towards psychological needs of people being treated of cancer. Statistically significant associations were found through the results confirm the earlier research findings and prove the need to educate patients about effective stress-management methods and develop strong supportive relationships. Such insights carry vital implications on mental health interventions. The development of both able coping mechanisms and creation of effective sources of support should therefore be the focus of such programs aimed at enhancing the emotional resilience. When addressing both of these dimensions simultaneously, medical professionals will have opportunity of helping patients not only face the immediate adversity of disease but develop long-term mental resiliency when they move forward to surviving disease.

#### Recommendations

This study demonstrates that patients with breast cancer can experience significant improvements in mental health after receiving special and caring attention. It is suggested that emotional and psychological care should be taken as a vital part of treatment by a healthcare specialist. Through communication about healthy coping mechanisms, particularly when facing fear, uncertainty, and stress in the treatment setting, providers empower patient to walk through their experience with more strength and clarity. Such support, given early and regularly, can reduce emotional stress and keep the patients more focused on their healing. Meanwhile, it is important to have the good social networks. Patients manage to cope with their emotive struggles well when they feel listened to and supported both during informal discussions with loved ones and during professional support groups and online forums.

Facilitating and creating connection can diminish the loneliness that is evidenced in many cancer patients. It is vital not to generalize these interventions. Each patient is exposed to unique reality defined by age, education, income, stage of cancer and cultural background. Support system that responds to these individual differences can be designed to ensure that care is more relevant and more effective. Future research ought to consider what coping plans are most useful with various groups of patients, and how these strategies change over the course of time. Considerable attention should be paid to cultural and socio-economic contexts as well, as they are influential in way the patients see illness and react to assistance. Healthcare professionals can assist patient in finding a greater sense of control and well-being through emphasizing what matters most respect, empathy, and practical tools to survive emotionally, which will help the patient get through one of hardest times in their life.

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