

Optimism, Spousal Support and Quality Of Life in Women with Breast Cancer

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ABSTRACT

Breast cancer is the 2nd most common cancer among women.

Aim: To determine the level of optimism and spousal support in women with breast cancer.

Study Design: Cross sectional study.

Methodology: Data was collected using the purposive sampling technique from oncology departments of two public hospitals. Measures for data collection consisted of a demographic information sheet, and three scales including LOT-R (Ay,2009), DCI (Shuja et. al., 2020) and WHO-QOL BREF scale (Saqib,2017). A total of 80 women with a mean age of 35(SD=6.95) participated in the research.

Statistical analysis: The collected data was analyzed by using SPSS version 25. Chi square were applied with P-value< 0.05 as significant.

Results: Correlation revealed that optimism had a significant positive relationship with negative dyadic coping and with QOL scales except for Physical Health. All the subscales of DCI had a significant relationship with the subscales of QOL. It was found through HLM that education, socioeconomic status, cancer stage, monthly income, professional status after illness and optimism made a statistically significant contribution.

Conclusion: It was concluded that optimism, negative dyadic coping and quality of life has a significant relationship. Likewise, education, socioeconomic status, cancer stage, monthly income, professional status after illness and optimism were found to be the determining factors of quality of life.

Keywords: Optimism, Quality of life and Spousal Support.

INTRODUCTION

Breast cancer is the most common form of cancer in women. Even with the efforts made for the prevention, screening and treatment, 10% of it accounts for breast cancer making it the second highest diagnosed malignant neoplasm cancer after lung cancer¹. The support provided by the spouse in enhancing optimism and improving the life's quality of women with breast cancer is a less explored domain. According to the world cancer report, cancer caused 458503 deaths out of which 13.7% were women². It was supported by the research that the women diagnosed with breast cancer deals with threat regarding the disfigurement of their body and its impact on their relationship with their spouses³.

Optimism is known to have an impact on psychological and emotional adjustment, and issues related to self-esteem and satisfaction with life⁴. McGregory et. al., (2004) found that the levels of distress and cancer related worry was less in women with higher levels of optimism⁵. So, it was concluded that positivity equips a person to deal with the challenges by predisposing them with medical compliance, benefits achieved with the support and cognitive strategies⁶.

Social relationships are known to provide support in times of need. Thoits (2010) defined social support as the accessibility of support that could be felt emotionally, practically, or informationally from the significant others like family, friend, and coworkers⁷. Women with breast cancer link spousal support with better psychological adjustment, less distress and enhanced quality of life. As mentioned earlier that married woman with breast cancer perceives their partner as the primary source of support and they can be invaluable resources in coping with challenges of breast cancer. In contrast to these, through a study, it was revealed that perception of partner support and unsupportive behaviors are associated with psychological distress in breast cancer patients⁸.

The diagnosis of breast cancer launches the impairment in quality of life and it continues throughout the hostile treatment and sometimes beyond that. Chemotherapy is known to be the one of the most common treatment methods. From 65% of cancer population an estimated 25% receive chemotherapy as a first form of treatment. However, besides its therapeutic effects, it is inevitable to look away from the side effects it has on a person's overall wellbeing. Unlike other therapies, the side effects of chemotherapy include nausea, fatigue, and thrombocytopenia and mouth ulcers⁹. The diminished ability to work and hindered

functional capacity are some of the unfavorable effects of chemotherapy. The symptoms of chemotherapy are not just dysfunctional but include psychological and emotional aspects¹⁰. In 2006, Friedman and his colleagues carried out research on breast cancer patients and established optimistic women had better emotional, functional, and social wellbeing, less distress, lower mood disturbance than pessimistic women¹¹. Moreover these women reported access to good social support¹¹. In the light of above description, it's a health issue that remained untouched in our society but it's a common health issue that needs investigations. Hence, we planned current project to see predictive strength of optimism and effect of spousal support on quality of life among women with breast cancer.

Objectives: To determine the level of optimism and spousal support in women with breast cancer.

METHODOLOGY

Married female patients with intact families (n=80) who suffered from breast cancer with age ranging from 25-50 years and receiving treatment were enrolled. However, patients who had any other medical condition or psychological illness were excluded. Detailed demographic history was taken. For optimism, the Urdu version of the Revised Life Orientation Test by Nailah Ayub (2009) was used¹². Originally the scale was formed by Scheier and Carver in 1985. It is a 10 item, Likert Type scale. The point ranges from 0 to 4 where 0 strongly disagrees and 4 strongly agree. The internal consistency was found to be similar to what was found by the original authors. The Cronbach's alpha is 0.78.

For the health-related quality of life in cancer patients, an Urdu version of 26 items self-reported measure; WHOQOL-BREF (Lodhi et al. (2017)¹³ was used. It is a Likert type scale with an internal consistency of 0.86. However, acceptable reliability was found for physical, psychological and environmental domains i.e. alpha= 0.78, 0.75, and 0.73, respectively), but reliability was low (alpha= 0.56) in the social domain.

The instrument used for measuring the spousal support was the Urdu version of the Dyadic Coping Inventory by Guy Bodenmann in 2008. It was translated into Urdu by Sultan Shuja et al. (2020)¹⁴. It is a 36 item, Likert type scale ranging from 1 to 5. The internal consistency for the DCI subscales ranges from adequate to high level that is $\alpha = .71$ und $.92$.

Statistical Analysis: Data was analyzed by using SPSS v.25. Variables like age, marriage duration and children were presented by mean ± SD. To evaluate relationship between optimism, spousal support and quality of life in women living with breast cancer, Pearson Product Moment Correlation was done. Regression Analysis for Variables Predicting Quality of Life with p-value <0.05 taken as significant.

RESULTS

Mean ± SD for age, marriage duration and number of children for the sample size of 80 females. The age range was 25-50 (M= 34.987, SD = 6.95). The mean marriage duration was 11 years and a standard deviation of 7.08. whereas the mean number of children was 2 and the standard deviation was 1.44. It also gives the range of their education level was uneducated to masters or higher levels, in which most of them studied till middle school (32.5%) as shown in table-1.

Table-2 indicated the number of items, mean, standard deviation, range, skewness, kurtosis and Cronbach reliability of the totals scale and their subscales. The Cronbach's alpha for the total scale of the Dyadic Coping Inventory is .863 which is strongly reliable. However, for its subscales, the Cronbach's α ranges from 0.56 to .94. Similarly, the World Health Organization Quality of Life scale has strong reliability with .940. Whereas, for its subscales, the Cronbach's α ranges from .78 to .92. Moreover, the life orientation test revised has a reliability of 0.600 which was relatively low.

Table-1: Demographic Descriptive of the Research Participants (n= 80)

Variables	M	S.D	F	Percentage (%)
Age	34.987	6.95		
Marriage Duration	11	7.08		
Children	2	1.44		
Education				
Uneducated			7	8.8
Middle School			26	32.5
Intermediate			14	17.5
Bachelors			19	23.8
Masters or Higher			14	17.5
Socioeconomic Status				
Low			34	42.5
Middle			38	47.5
High			8	10
Family System				
Nuclear family			37	46.3
Joint family			43	53.8
Professional Status				
Housewife			64	80
Professional			16	20
Professional Status after illness				
None			64	80
Teacher			10	12.5
Banker			2	2.5
Clinical Psychologist			2	2.5
Doctor			2	2.5
Any other Disease				
None			67	83.8
Blood pressure			5	6.3
Migraines			1	1.3
Hepatitis			3	3.8
Diabetes			2	2.5
Asthma			2	2.5

Table-2: Descriptive Analysis of Study Variables in Sample (n= 80)

Variables	K	M	S.D	Range		Skewness	Kurtosis	A
				Min.	Max.			
Optimism	10	17.93	2.28	15.0	24.0	.843	.270	0.6
DCI	37	106.33	14.45	69.00	143.00	-1.60	.207	0.88
SCO	4	12.53	3.60	4.00	20.00	-.365	-.340	.889
SDCO	6	17.39	3.07	10.00	25.00	-.218	-.166	.675
DDCO	2	6.43	1.42	2.00	10.00	.048	.552	.557
NDCO	4	9.11	3.19	4.00	19.00	.686	.756	.793
SCP	4	12.81	3.18	4.00	20.00	-.564	.380	.773
SDCP	5	15.79	4.86	5.00	25.00	-.732	.032	.941
DDCP	2	6.17	1.92	2.00	10.00	-.603	-.036	.784
NDCP	4	10.83	3.20	4.00	18.00	-.075	-.404	.728
CDC	5	15.43	4.78	5.00	25.00	-.293	-.239	.886
QOL		80.6667	17.73	51.00	119.00	.095	-1.033	0.940
Ph. Health		19.1266	5.69	9.00	33.00	.265	-.270	.855
Psy. Health		18.5875	3.91	11.00	27.00	.174	-.769	.777
Soc.Relationships		9.2405	1.78	5.00	15.00	-.054	1.545	.870
Environment		25.6582	7.34	14.00	37.00	-.194	-1.206	.923

K= No. of items, α= Cronbach alpha, M= Mean, SD= Standard Deviation

Table-3 demonstrated the hierarchical linear regression analysis. In step I, all the demographic variables was added. In step II, optimism was added and in step III, spousal support variables were added. With the addition of demographic determinants, the variance was 62.3%. But when the optimism variables were added, the variance was 65.0% and finally, when spousal support variables were added, a variance of 78.6% was observed. The R square change was 0.136, the overall variance explained by the variables of interest (optimism and spousal support) indicated an additional variance of 13.6% (.136 *100), when the effect of demographic determinants was controlled. This is a statistically significant contribution as indicated by Sig F change value for this line was .001. The overall model was significant as indicated [F(21,54) =9.42, P<.0005]. With all the variables entered, it was seen that education, socioeconomic status, cancer stage, monthly income, professional status after illness and optimism made a statistically significant contribution. It

is seen that optimism (β = .187) makes a significant contribution in determining the quality of life (p<.05). While the quality of life could not be predicted by spousal support (p>.05) in the present sample.

Table-3: Hierarchical Regression Analysis for Variables Predicting Quality of Life

Predictors	B	T	P
Model 1 (R=.623, ΔR2=.623)			
Age	.18	1.20	.23
Education	.29	2.71	.00**
Socioeconomic Status	.31	2.63	.01**
Marriage Duration	.07	.47	.63
Cancer Stage	-.28	-3.29	.00**
Monthly Income	.25	2.44	.01**
professional status after illness	.29	2.35	.02*
Model 2 (R=.650, ΔR2=.026)			
Optimism	.18	2.17	.03*
Model 3(R=.786, ΔR2=.136)			

SCO	.03	.32	.74
SDCO	.04	.40	.69
DDCO	.12	1.36	.17
NDCO	.06	.55	.58
SCP	-.14	-1.22	.22
SDCP	.19	1.24	.21
DDCP	-.10	-.69	.48
NDCP	-.18	-1.30	.19
CDC	.20	1.29	.20

*Statistically significant

It was seen that the preliminary assumptions for MANOVA were met. There were no violations noted for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices and multi-collinearity (table-4).

Table-4: Socioeconomic Class on Optimism, Spousal Support and Quality of Life

Variable	Wilk's λ	F	P	Partial η^2
Socioeconomic status	0.52	8.61(6,138)	.000*	.27

DISCUSSION

Chronic illnesses are not just physically challenging but are also mentally, socially and economically draining for patients¹⁵⁻¹⁷. This research was designed to investigate optimism, spousal support and quality of life in women living with breast cancer. For the present study, it was hypothesized that there is likely to be a significant relationship between optimism, spousal support and quality of life in women living with breast cancer. Findings revealed that optimism had a significant positive relationship with negative dyadic coping and with Quality of Life scales except for Physical Health. All the subscales of the Dyadic Coping Inventory had a significant relationship with the subscales of Quality of Life. This was supported by Acquati and Kayser (2019) who found that younger couples are more likely to use negative or hostile dyadic coping which significantly affects the quality of life of the patient and the partner¹⁸.

Similarly, Rock and her colleagues reported that breast cancer patients with optimistic partners were more likely to experience marital satisfaction¹⁹. They argued that optimism is a positive belief about the world which is less likely to be maintained under stressful circumstances¹⁹. Hence most satisfaction is experienced when these women experience pessimism and yet maintain a positive outlook of the world with the help of an optimistic partner¹⁹.

Secondly, it was hypothesized that optimism and spousal support predicts the quality of life in women living with breast cancer. The results revealed that optimism predicts quality of life in women with breast cancer. In 2016, Caprara et.al. found a significant association between optimism and quality of life in cancer patients⁶. Patients with higher levels of optimism reported less physical, social, emotional and cognitive impairments⁶. Similarly, Finck et.al. (2018) found a positive correlation between optimism and quality of life for breast cancer patients²⁰.

Previous research indicated that women receiving support from their spouses and nuclear family at the times of breast cancer reported less low mood and better quality of life and mental health²¹. These findings were supported by Gunes and Calisir (2016) who found that women with higher perceptions of support had better physical functioning, vitality, emotional role functioning and good quality of life²². However, the findings of the present study reported no significant contribution of spousal support in determining the quality of life.

This could be explained through multiple reasons. As per Gremore et. al.(2011) found that women believed that their husbands were unsupportive as they indulge in behaviors like forceful cheering, minimizing the problem and insensitive²³.

This can be explained in terms of cultural complexities as well. Pakistan is an Asian country where genders role are well defined in every relationship. A Qualitative research was carried

out in 2005 on marital satisfaction in women living in Pakistan. Upon asking about marital satisfaction, the women responded that women need to adjust in every situation because men seldom do²⁴. It was concluded in the research that gender roles in Pakistan are clear²⁵.

Thirdly, it was found that levels of education, socioeconomic status, cancer stage, monthly income and professional status significantly predicted quality of life in women living with breast cancer. In 2017, Sharma and Purkayastha investigated the factors determining the quality of life in breast cancer patients and found that socioeconomic status, levels of education, and cancer stage was a significant factor in determining the quality of life²⁵. In Pakistan, Chagani and her colleagues (2017) found similar results²⁶.

Limitations: This study lacked genetic workup among patients in-order to find the genetic cause with limited resources and financial constrains.

CONCLUSION

It was concluded that there was a significant relationship between optimism and negative dyadic coping and quality of life except for physical health in women with breast cancer. Dyadic coping inventory also had a significant relationship with the quality-of-life scale. It was found that education, socioeconomic status, cancer stage, monthly income, professional status after illness and optimism made a significant contribution in determining the quality of life. However, it was found that quality of life in breast cancer patients was not predicted by spousal support. The difference in socioeconomic status was seen in optimism, spousal support and quality of life and it was found that women belonging to higher socioeconomic status reported better spousal support and quality of life.

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SM: Contributed to the proof reading.

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