

BODY ESTEEM AND PSYCHOLOGICAL DISTRESS AMONG CANCER PATIENTS: THE MEDIATING ROLE OF RESILIENCE

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Original Article

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Abstract

The current study focused on Body esteem and psychological distress in cancer patients undergoing radiotherapy or chemotherapy; the mediating role of resilience. A convenient sample of 200 cancer patients who were currently undergoing the sessions of radiotherapy/ chemotherapy, were tested. Data collection form was consisted on consent form, demographic information Performa to scrutinize the essentials about cancer patients under treatment, the scale of body esteem (urdu version), kessler's psychological distress scale (urdu version), resilience scale (urdu version). The data was thus obtained through statistical analysis of SPSS. To acquire the basis and essential information about collected data descriptive statistics was applied. Correlation was calculated among study variables. Mediation analysis was done for the effect of body esteem and resilience on psychological distress. Findings expounded that resilience was significantly negative but partially a mediator between body esteem and psychological distress. Body esteem was found direct and in-direct predictor of psychological distress.

Keywords: radiotherapy, chemotherapy, body esteem, psychological distress, resilience.

Introduction

Usually we all care about our appearance that we are looking perfect to others or we need to do something to be more attractive. Often we don't admit that we are looking perfectly perfect we always want to be more attractive to others. If a person is satisfied, accepts and likes his or her body the more he or she will be safe from anxiety. Grogan (2008) defined the term body esteem which is often denoted as body image that how a person views his/her outer look. He explained that it is the observation of thoughts, feelings and insights toward one's body. Components of body esteem are the views of outer look and emotive replies to those views.

The term of body esteem has been used in the scale of body esteem developed by Franzoi and Shields in 1984 to evaluate the satisfaction about body; they explore the term body esteem and found that it is an essential element of self-esteem which explains that what a person feels after looking the body (Franzoi & Shields, 1984).

Przezdziecki et al., (2013) conducted a study on body changes and tried to explore the effect of body alterations after the treatment of breast cancer on psychological distress. It was assumed that self-compassion is the main source which improves the adjustment capability to body changes produced by cancer treatment. The study was aimed to explore whether self-compassion facilitates the association between psychological distress and the image of the body. A sample of 279 females was examined through the scale of Body Image, *DASS (Depression, anxiety and stress scale)*, and self-compassion scale. The results specified and concluded that disruption of body image and poorer self-compassion both are responsible to increase the level of distress among patients with breast cancer.

Cancer disease is very harmful to life, one have to undergo variety of situations such as to be labeled as cancer patient, to be aware

of the outcomes of its treatment, to live with cancer, depression, anxiety, and the upcoming difficulties in family. So, it is quite clear and genuine that being labeled with cancer causes anxiety and depression among adults (Yang et al., 2014).

Carron and Liu (2010) reported that psychological distress disturbs the individual's life directly/indirectly as it is associated with mental and physical health and has a negative impact on mental health. Psychological distress is a negative state but it is not specific. Distress is termed as uneasiness, awkwardness, and inability to deal with the adverse circumstances effectively. Chen et al (2009) concluded the occurrence of distress in patients undergoing the radiotherapy for the cancer of neck/head they also explored the linkage between anxiety, depression, medical variables and demographic variables. For this study, total 40 patients in which 15 females and 25 males were selected as sample. Half of the patients received chemotherapy and *BDI-II (Beck depressive inventory)* and *HADS (Hospital anxiety and depression scale)* were used before and after radiotherapy to evaluate the effects of treatment on distress. By using *HADS* and *BDI-II* depression before radiotherapy from mild level to severe was 58% and 45%. Anxiety before radiotherapy was 7%. *BDI-II* and *HADS* indicated that during the radiotherapy treatment the level of depression is increased and continued even at follow up appointment ($P < 0.001$ for both). $P < 0.05$ for all variables which were linked with depression after and before radiotherapy, their age which was less than 55 years, status of employment, and their marital status. The study concluded that patients who were undergoing radiotherapy showed distress before the treatment and the level of distress rose during radiotherapy.

Resilience is known as practice of adjusting positively at hard time, disaster, trauma, and at the time of stress (American Psychological Association, 2014). Davidson et al., (2005) explain that resilience originates from

two Latin words *salire* and *resilire*, *salire* means to jump and *resilire* means spring back, it is actually the ability to improve, to get better or to jump back. Tugade and Fredrickson (2004) defined that psychologically resilience is a capability to spring back after an adverse emotional incidence it is also an ability to change or adjust the burden of stress. Masten (2014) explained that resilience is an ability of active system that adjusts with adverse events. According to Merriam-Webster Dictionary (2002) resilience is the capacity to get better from disaster and an ability to adjust.

Cohen, Baziliansky and Beny (2014) conducted study on colorectal cancer patients and connotations between emotional distress and age to evaluate mediating role of resilience. In the study 92 people diagnosed with colorectal cancer, (age range 27 to 87) were obtained as sample. The study was cross-sectional and used Wagnild and Young's scale for resilience, and brief symptom inventory-18. The results explore that old age patients, males, and low problems because of cancer were considered as high level of resilience in patients and low level of emotional distress. The results concluded that on emotional distress, resilience is responsible for mediating the effects of age, gender.

Wu et al., (2015) defined cancer symptom distress, quality of life, and resilience in patients with cancer and to evaluate resilience as mediator. For this study, 40 teen age patients with cancer were enrolled as sample and demographic questionnaire, cancer symptom scale for distress, resilience scale, Minneapolis-Manchester *QOL (quality of life)* scale were used to gather data. Against quality of life, cancer symptom distress scale and resilience both were regressed. Results described that resilience mediates affiliation between quality of life and cancer symptom distress.

Hypothesis

1- There would be a negative relationship between body esteem and psychological

distress in cancer patients undergoing radiotherapy or chemotherapy.

- 2- There would be positive relationship between body esteem and resilience in cancer patients undergoing radiotherapy or chemotherapy.
- 3- There would be negative relationship between resilience and psychological distress in cancer patients undergoing radiotherapy or chemotherapy.
- 4- Resilience mediates the relationship between body esteem and psychological distress in cancer patients undergoing radiotherapy or chemotherapy.

Method

The present study was designed to evaluate the mediating role of resilience on psychological distress. For the study a sample of 200 cancer patients undergoing radiotherapy or chemotherapy were selected from the Oncology wards of government and private hospitals of Faisalabad to acquire the representative sample. The age range of patients was between 15 to 80 years. A purposive sampling strategy was used.

Variable Definitions

Body Esteem Scale

Franzoi and Shields (1984) developed the scale of body esteem. This scale explores the features which are associated with body esteem in males and females. The scale of body esteem contains 35 items, in which 17 items taken from the scale of Body Cathexis and 16 items added new. The scale has 3 sub-scales which are inter-related with each other and explains main dimensions of body esteem. These sub-scales or factors are developed for men and women. Sub-scale 1 contains two factors, for males (*PA*) Physical Attractiveness, for females (*SA*) Sexual Attractiveness. Sub-scale 2 contains two factors, for females (*WC*) Weight Concern, for males (*UBS*) Upper Body Strength. Sub-scale 3 contains one factor (*PC*) physical condition for men and women.

Kessler Psychological Distress Scale (K10)

Ronald C. Kessler established the 'Scale of psychological distresses in 1992 at Harvard University. Urdu version of this scale was used which is translated by Ghaffar, (2014). The 'Scale of Kessler Psychological Distress' is very modest evaluation for psychological distress. The scale contains on 10 items, each item has 5 levels which explores the emotional state of the subject. The scale is used to detect the distress level in the subject. The subject can answer the questions by taking the questionnaire in hand or can simply answer the questions which are asked by the researcher.

Resilience Scale

Wagnild and Young (1993) constructed the Resilience Scale to explore the level of resilience. The scale contains on 25 items which is a self-report measure and the responses for each item based on the Likert format. The range of these responses from 1 to 7 (strongly disagree to strongly agree). The method of concluding the level of resilience is labeled as 25-100 means resilience is very low, 101-115

indicates low resilience, 116-130 exhibits resilience is moderately low, 131-145 means resilience is moderately high, 146-160 high resilience, and 161-175 indicates resilience is very high. Reliability for the resilience scale by Wagnild and Young (1993) is 0.91 which represents that the scale is highly reliable.

Procedure

Demographic information about each participant was collected and the file of each patient maintained by doctors was checked to know about the therapy sessions, cancer type, and duration. Important information and instruction about mentioned questionnaires was given to all participants and the researcher was available to them to understand the statement. The information was collected on the time given by the consultant doctor of the patient.

Statistical Analysis

A regression analysis was run to explore the mediating role of resilience between body esteem and psychological distress. Data was analyzed on 'Statistical Package for Social Sciences' using SPSS PROCESS.

Results**Table 1***Descriptive Characteristics of the variables Used in current study (N=200)*

Scales	N	M	SD	Cronbach alpha	Skewness	Kurtosis
Body Esteem	200	91.38	21.9	.93	-.07	-.21
Psychological distress	200	29.98	11.4	.94	-.08	-1.43
Resilience	200	99.26	31.7	.95	-.01	-1.34

The results expounded the findings of reliability analysis for scales. Cronbach alpha of all 3 scales were computed and were found as .93, .94, and .95 respectively. The values of skewness and kurtosis were also calculated. Skewness value for body esteem was -.07, for psychological distress was -.08, for resilience was -.01. The kurtosis value for body esteem was -.21, for psychological distress was -1.43, and for resilience was -1.34.

Table 2*Correlation of Variables studied in current research (N=200)*

Variables	1	2	3
1	--	-.81**	.67**
2	--	--	-.75**
3	--	--	--

Note. 1 = Body esteem; 2 = Psychological distress; 3 = Resilience

* $p < .05$. ** $p < .01$. *** $p < .001$

Results elucidated the outcomes of Pearson's correlation analysis. The association was examined among body esteem, psychological distress, and resilience. Results indicate that body esteem is linked significantly and negatively with psychological distress; body esteem is significantly positive connected with resilience. Psychological distress has significant negative relationship with resilience.

Table 3*For the effect of Body-esteem and Resilience on Psychological Distress (N=200)*

Predictors	Psychological Distress		
	Model 1 B	Model 2	
		B	95% CI
Constant	68.34**	69.60**	[65.99, 73.21]
Body-esteem	-.42**	-.29**	[-.34, -.24]
Resilience		-.13**	[-.17, -.10]
R ²	.65	.73	
F	370.76**	261.49**	
ΔR^2		.46	
ΔF		169.31**	

** $p < .01$; B = Unstandardized regression coefficient; CI = Confidence interval

Results elucidated that resilience is significantly negative but partially a mediator between body-esteem and psychological distress. While, body-esteem is significant negative direct and in-direct predictor of psychological distress.

Discussion

The current study was aimed to explore the mediating role of resilience between body esteem and psychological distress. The study revealed that resilience is a partial mediator for body esteem and psychological distress as well as it has significant negative effect. However, the results of mediation also revealed that for psychological distress, body esteem is predicted to have direct and in-direct significant negative effect.

Li and Wang (2016) explored the connection of psychological stress with the symptoms of anxiety and depression among Chinese cancer patients of renal and bladder and the role of resilience as mediator. This cross-sectional study enrolled 327 patients of bladder cancer and 268 patients of renal cancer and administered resilience scale-14, self-rating anxiety scale of Zung, perceived stress scale, and depression scale center for epidemiologic studies during 2013 to 2014. The ratio of symptoms of anxiety and depression in patients of bladder cancer was 71.3% and 78.0%, and in patients of renal cancer the ratio was 68.3% and 77.6%. The study concluded that resilience was negatively associated with symptoms of anxiety and depression while psychological stress was associated positively.

Matzka et al., (2016) concluded the association between psychological distress, resilience and physical activity in patients of cancer undergoing radiotherapy or chemotherapy. The study elucidated the relations among distress, resilience, and social support. The study proved that resilience is negatively linked to psychological distress. Results showed that patients who had high level of resilience were low on psychological distress. Mancini and Bonanno (2009) stated that resilience is actually an instrument of positive version which alters and guards from psychological distress.

Rak and Patterson (1996) explained the theory of resilience that it is complicated field in

which psychologists, social workers, sociologists, and others are involved. They also described that the theory of resilience deals with powers and strong points of people and make them able to cope with difficult situations. Resilience theory is linked with addition in strengths and a fall in pathology.

Resilience is a skill to get well from the depression, misfortune, and ailment rapidly which empowers to continue to the original situation after the trauma or stress (American Heritage Dictionary, 2005). The present study examined the association between resilience and psychological distress among patients with cancer. On the behalf of recent researches, resilience is proposed as ability to deal positively with misfortunes of life such as cancer. In this research, 152 hospitalized patients of cancer were selected and Resilience Scale by Connor Davidson and *HADS* were applied to measure distress and resilience. Results of this study indicate that resilience in cancer patients causes low level of distress. Study investigates that providing different interventions which improve resilience will be helpful to cope with distress in cancer patients (Min et al., 2013).

Conclusion

The present research elucidated the association between body esteem and psychological distress among patients of cancer, as well as the study revealed the mediating role of resilience using *SPSS PROCESS*. The study found and stated the partial mediating role of resilience between body esteem and psychological distress.

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