A Comparative Study on Resilience, Perceived Social Support and Hopelessness Among Cancer Patients Treated with Curative and Palliative Care

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ABSTRACT

Aim: Psychological distress is common among patients affected by cancer. In this study, we examined the relationship between resilience, social support, and hopelessness among cancer patients treated with curative and palliative care.

Patients and Methods: Sixty cancer patients in the age range of 18–65 years were randomly selected and divided into two groups based on their treatment intent namely, curative care (n = 30) and palliative care (n = 30). Both groups were assessed by the following instruments: Bharathiar University Resilience Scale, Multidimensional Scale of Perceived Social Support and Beck Hopelessness Scale.

Results: Resilience was significantly associated with less hopelessness and higher levels of perceived social support.

Conclusion: Cancer patients are found to be resilient, and the role of social support and hopelessness on promoting resilience cannot be ignored.

Key words: Cancer, Hopelessness, Psychological distress, Resilience, Social support

INTRODUCTION

Cancer is a life-threatening illness and has the capacity to touch all aspects of an individual's health: Physical, functional, psychological/cognitive, social, economic and spiritual.[1] Cancer diagnosis and treatment, and their sequelae are thought of as adverse experiences. For most individuals, they represent significant stressors, and for some, the diagnosis of cancer is a traumatic event.[2] There has been a growing interest in understanding the psychological concerns of persons diagnosed with cancer.

Social support is also identified as an important factor alleviating cancer patients' psychological distress.[3,4] Among patients with cancer, social support is associated with fewer psychological symptoms and greater well-being.[5,6] Social support may help individuals focus on the positive aspects and potential benefits of a difficult situation.[7]

Lack of hope is associated with various manifestations of psychological morbidity.[8] Hope, when used as a method of struggle, is helpful in decreasing the stress caused by cancer. As for hopelessness, it increases stress and negative expectations about future. Patients with

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cancer experience the feelings of hopelessness deeply in the adjustment process. Hopelessness is caused by perceiving cancer as a negative and deadly disease.[9]

Despite experiencing catastrophic events, many cancer survivors manifest remarkable resilience in the face of illness. Resilience is the ability to recover quickly from disruptions in functioning that result from stress appraisals and to return to the previous level of functioning.[10] In recent years, the role of resilience in the process of cancer treatment has been given increasing attention. Studies have found that resilience can powerfully predict patients' fatigue from treatment[11] and good resilience can help patients reduce treatment-induced damage to bodily functions and shorten the time of bodily function recovery.[12] Patients with good resilience can treat their disease correctly and maintain a relatively good psychological state, thereby resulting in a better quality of life.[11,13] Coping also appears to be a critical element of resilience outcomes for patients with cancer. Among breast cancer survivors, those who used positive coping techniques have reported better quality of life and reduced distress.[14] Studies of patients with brain tumors have associated baseline resilience characteristics (e.g., cognitive processing, hope, and spirituality) with improved inner strength, quality of life, social support and positive psychological functioning.[15]

The diagnosis and treatment of cancer have been perceived as a potentially traumatic event.[16] Various studies found that individuals with high resilience have coped with traumatic events more efficiently than those with low resilience[17] and higher resilience has been associated with reduced emotional distress after the exposure to the traumatic events.[18,19] Similarly, cancer patients with high resilience may be less dependent on psychosocial support to manage their stressful conditions relative to those with low resilience.[20] Social support has been found to improve the overall well-being,[21] minimize the risk of psychological distress,[22] and a key factor in increasing the hope among patients diagnosed with cancer.[23,24]

Cancer is a type of event that could elicit attributions sufficient for the development of hopelessness.[25] Many studies have examined the relationship between social support and hopelessness[26,27] and concluded that poor social support concurrent with depression and hopelessness. Another study[28] implicates hopelessness as a psychological factor which is made worse when a person has to cope with cancer without a partner. Specifically, we have focused on the ways in which these two variables (social support and hopelessness) might interact to promote resilience among cancer patients treated with curative and palliative care. In our study, we sought to examine the relationship between the type of cancer treatment (i.e., curative vs. palliative) and parameters like resilience, perceived social support and hopelessness. There is an abundance of literature on this subject worldwide, but there is a scarcity of studies done on this subject in this part of the world. Hence, there is a need for this investigation. Our hypothesis was that there would be no significant difference between the two groups on resilience, perceived social support, and hopelessness.

Aim

To find if there is a significant difference in the scores on measures of resilience, perceived social support and hopelessness between cancer patients receiving curative treatment versus those receiving palliative treatment.

PATIENTS AND METHODS

A cross-sectional study was done using a convenience sampling. The study sample was recruited from in-patients in a palliative care unit attached to the Department of Medical Oncology catering to the needs of cancer patients at Sri Ramachandra University in Chennai. All the 60 cancer patients in the study group were undergoing treatment for early and advanced stages of cancer. The study was conducted between September 2014 and March 2015. Patients were eligible for selection if they were aged 18–65 years of age, cooperative and communicative for the interview. Patients were excluded if they had significant cognitive impairment or psychosis, or physical limitations that precluded their participation in the study. Twenty-two percent of the total number of patients (269) admitted during the study period consented to participation and constituted the study group. Most patients cited physical discomfort and/or fatigue as the reason for their nonparticipation. Group one comprised 30 cancer patients (early stage) under curative care. Curative care is the health care given for medical conditions where a cure is considered achievable, or even possibly so, and directed to this end. The modalities adopted in the curative care were radiotherapy, chemotherapy, and surgery. In the other group, 30 patients with advanced stage of cancer were receiving palliative care. Palliative care is a medical specialty concerned with the treatment of patients with terminal illness (such as cancer) to improve their quality of life through physical, social, psychological and spiritual care. Management strategies were symptomatic management using medications, psychotherapy and family interventions. All participants were informed of the purpose of the study

and were provided with written informed consent. The study was approved by the Institutional Ethics Committee. The study sample was assessed using the following instruments.

Measures

The Bharathiar University Resilience Scale

The Bharathiar University Resilience Scale (BURS), developed by Annalakshmi[29] was used to measure resilience. It consists of 30 items. Seven domains of resilience were identified. Each statement is scored on a 5-point Likert scale (1, not at all appropriate to 5, most appropriate). The responses of the participant for all the 30 statements in the scale are summed up to yield a single score on the scale representing the level of psychological resilience of the individual. Total scores range from 30 to 150. The scale has adequate reliability. The Cronbach alpha was found to be 0.82. The scale had significant positive correlation with Friborg Resilience Scale, 0.349.

Multidimensional scale of perceived social support

The Multidimensional Scale of Perceived Social Support (MSPSS), developed by Zimet *et al.*[30] was used to assess the perceived social support. The scale evaluates the adequacy of social support received from three different sources namely family, friends and significant others. It consists of 12 items. Each item is rated on a 7 point scale (1, very strongly disagree to 7, very strongly agree). Total scores range from 12 to 84. High scores indicate high social support. The scale demonstrated good internal consistency with an alpha coefficient of 0.85–0.91.

Beck hopelessness scale

The Beck Hopelessness Scale (BHS), developed by Beck *et al.*[31] comprised 20 true-false statements that assess the degree of pessimism and hopelessness. Each of the 20 statements is scored 1 or 0. The item scores are summed to yield a total score that can range from 0 to 20 with higher scores indicating greater hopelessness. Beck and Steer[32] score the measure as follows: 0–3, minimal range, 4–8, mild hopelessness; 9–14, moderate hopelessness; and 15 and above, severe hopelessness. The internal consistency ranged from 0.82 to 0.93.

Following informed consent, all participants were interviewed. Their sociodemographic details were collected, and they were assessed by the BURS, MSPSS, and BHS scales. The scales were administered by the researcher. The data was collected in one session which lasted for a duration of 1 h. The respondents were assured of confidentiality. After collecting data and coding and entering in the Statistical Package for the Social Sciences software (SPSS Inc. Released 2007. SPSS for Windows, Version 16.0. Chicago, SPSS Inc.), analysis was done using Student's *t*-test and Pearson's product moment correlation co-efficient. The *t*-test was used to find out the difference between the means and correlation was used to measure the association between two measured quantities. The significance level was set at 0.05.

RESULTS

Information on sociodemographic characteristics of cancer patients treated with curative and palliative care is presented in Table 1.

The age range of the subjects was 18–65 years. Mean age of the participants in the curative and palliative care was 40 (standard deviation [SD] = 12.41) and 44 (SD = 10.12) years, respectively. A large number of subjects were females (63.3%), married (85%), had completed high school (63.3%), and were not employed (53.3%). It was found that participants in the palliative care had low resilience, lower levels of perceived social support and showed moderate levels of hopeless feelings than the participants in the curative care and the results are presented in Table 2.

Table 1: Sociodemographic characteristics

	n	(%)
Age range (years)		
18-30	11	18.4
31-45	29	48.3
46-65	20	33.3
Gender		
Males	22	36.7
Females	38	63.3
Education		
8-10th standard	38	63.3
11-12th standard	6	10.0
Graduation	16	26.7
Occupation		
Employed	28	46.7
Unemployed	32	53.3
Marital status		
Single	8	13.3
Married	51	85.0
Separated	1	1.7
Income (per month)		
<Rs. 5000/-	4	6.7
Rs. 5000-7000/-	17	28.3
Rs. 8000-15,000/-	19	31.7
Rs. 16,000-25,000/-	5	8.3
>Rs. 25000/-	15	25.0

The relationship between resilience, perceived social support and hopelessness (as measured by BURS, perceived social support scale, and hopelessness scale) was examined in curative care. The results [Table 3] showed that resilience significantly correlated with perceived social support in a positive direction and negatively correlated with hopelessness. Furthermore, perceived social support was negatively correlated with hopelessness. Similar pattern of correlation was observed in palliative care also. Resilience positively correlated with perceived social support ($r = 0.51$, $P < 0.01$) and negatively correlated with hopelessness ($r = 0.70$, $P < 0.01$). Similarly, perceived social support was negatively correlated with hopelessness ($r = -0.63$, $P < 0.01$).

DISCUSSION

The purpose of this study was to examine the relationship between resilience, social support, and hopelessness among cancer patients treated with curative and palliative care. The present study revealed that participants in the curative care have obtained high scores on the factors of resilience, social support and low scores on hopelessness than the other group. In this study, we found higher resilience among the participants in the curative care. Several reports suggested that individuals with higher resilience might have specific features including sound reality testing, good tolerance for negative feelings, strong capacity for self-reflection, and high responsibility.[33] All these features might provide better coping with cancer among participants in the curative care and then contribute to less emotional distress. These findings suggest the protective effects of resilience on emotional distress not only in general population,[34,35] but also in physically ill individuals.[36]

Table 2: Comparison of resilience, perceived social support and hopelessness between the two groups

	Curative care (*n*=30)		Palliative care (*n*=30)		*t*
	Mean	SD	Mean	SD	
Resilience	95.27	26.80	76.10	24.30	2.90*
Perceived social support	60.63	12.30	51.77	15.10	2.49**
Hopelessness	4.83	6.92	12.37	7.06	4.17***

*P<0.05, **P<0.01, ***P<0.001. SD: Standard deviation

Table 3: Correlation between resilience, perceived social support and hopelessness

	Resilience	PSS	Hopelessness
Resilience		0.456*	−0.717**
Perceived social support	0.456*		−0.500**
Hopelessness	−0.717**	−0.500**	

*P<0.05, **P<0.01. PSS: Perceived social support

The present study has found that the participants' (in curative care) hopelessness level decreases with the increase in their social support scores. The related literature reports hopelessness as a negative factor that causes patients to perceive cancer as a negative and deadly disease. As to social support, it is an important source that has positive effects on increasing longevity and emotional well-being as well as decreasing hopelessness in lifelong diseases such as cancer. These results correspond well with those of previous studies reported in the literature.[10,37] In the present study, it was observed that lower levels of perceived social support as well as cancer-related clinical characteristics reflecting serious medical conditions were likely to be related to higher levels of hopeless feelings among participants treated with palliative care. These findings are congruent with those in previous studies.[38,39]

Resilience was significantly associated with less hopelessness and high social support. These findings indicate that the participants are hopeful and have high social support. It is reported that the social support provided by the family affects the adaptation process and longevity positively.[10,37] Some studies indicate that patients and their relatives drift apart in the cancer process.[40] However, because of the traditional family structure in India, the participants of the present study were found to receive their social support mostly through their families. Social support has been found to minimize the risk of psychological distress in cancer patients.[22] Hence, the participants seem to be hopeful due to high social support they have.

Although emotional distress is a major concern in caring for cancer patients, a certain portion of cancer patients may cope successfully with their illness.[41] Individual differences in resilience cause patients to have different coping styles and adjustment capacities.[42] Social support is well-known to buffer against stress and to independently reduce emotional distress in cancer patients.[43,44] In the present study, we found that participants as a whole, in both groups, have high social support and was found to be hopeful and optimistic. Optimistic individuals responded more positively than pessimistic individuals and an optimistic disposition attracts others and promotes the development of social support.[45] Both optimism and social support are associated with improved overall well-being in cancer patients[46] which in turn foster resilience in cancer patients.[47,48] Similar findings have been observed in the present study also.

Resilience is generally considered as being dynamic and potentially modifiable by the proper interventions.[49,50] Interventions devoted to promote resilience such as stress management and resilience training would strengthen psychological resilience in cancer patients.[51] Since patients with advanced cancer may have limited treatment options and focus more on palliative care,[52] the issue of strengthening resilience would be more critical in this population.

There are several limitations of the present study. First, a cross-sectional design limits the complete understanding of the interplay of resilience on social support and hopelessness. Second, our sample was composed of a small number of hospitalized cancer patients which limits the generalization of our findings to long-term cancer survivors. Third, several psychological factors other than social support including optimism, spirituality were not studied. Thus, future studies including comprehensive psychological factors will be necessary in a larger sample of cancer patients to confirm the independent influence of resilience on emotional distress.

CONCLUSION

Cancer patients are found to be resilient, and the role of social support and hopelessness on promoting the resilience cannot be ignored.

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Conflicts of interest

There are no conflicts of interest.

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