



Influence of perceived social support and meaning in life on fatalism: A study of cancer patients

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Abstract

Objectives: The aim of the present study was to explore the relationship of perceived social support (support from family, support from friends and support from significant others) and meaning in life (presence of meaning in life and search for meaning in life) with fatalism (Mental adjustment) among cancer patients. The integrative effect of perceived social support and meaning in life on fatalism was also investigated.

Method: The sample of the study consisted of 200 cancer patients who were selected on purposive basis from Shri Maharaja Hari Singh Hospital, Srinagar, J&K and Jawahar Lal Nehru Medical College, Aligarh, Uttar Pradesh. The tools used for the present study were Meaning in Life Questionnaire (MLQ) developed by Steger, *et al.*, (2006); Multidimensional Scale of Perceived Social Support scale (MSPSS) developed by Zimet, *et al.*, (1988), and The Mental Adjustment to Cancer Scale developed by (Watson *et al.*, 1988). The data collected was analyzed by using appropriate statistical techniques like Pearson's product moment correlation and stepwise multiple regression analysis.

Results: The results showed significant positive correlation between support from family and fatalism ($r=.354, p>.001$); support from friends and fatalism ($.229 p>.001$); support from significant others and fatalism ($r=.318, p>.001$); overall perceived social support and fatalism ($r=.416, p>.001$); meaning in life and fatalism ($r=.274, p>.001$) and between presence of meaning in life and fatalism ($r=.426, p>.001$). However, there was a significant negative correlation between search for meaning in life and fatalism ($r=-.241 p>.001$) among cancer patients. Hierarchical regression analyses indicated that social support and meaning in life as a whole accounted for 22.9% variance of fatalism.

Conclusion: The findings of the study revealed that perceived social support and meaning in life have a significant positive correlation with fatalism. The largest Beta value (in the 3rd model) of presence of meaning in life ($\beta=.283, t= 3.779, p<.0001$) suggests that it made the strongest unique contribution in explaining fatalism and; the Beta value of total perceived social support was slightly lower ($\beta=.261, t= 3.439, p<.001$) which suggests that it made less of a contribution. On the basis of the significance level of the standardized beta value, it can be concluded that perceived social support and presence of meaning in life made a unique and statistically significant contribution to the prediction of fatalism among cancer patients.

Keywords: perceived social support, presence of meaning in life, search for meaning in life, fatalism, cancer patients

Introduction

It is estimated that there will be approximately 2-2.5 million cases of cancer in India at any given point of time, with around 7-9 lack new cases being detected each year. Nearly half of these cases die each year (Park, 2011). This burden is going to be double in 2026 (ICMR, 2003-2004). By 2020, up to 70% of the 20 million new cases annually are predicted to occur in the developing countries (Bruder, 1993).

The effect of any chronic illness like cancer, diabetes, HIV/AIDS on a person is life devastating. Physical health, psychological wellbeing, economic conditions as well as social well-being are badly affected by chronic diseases like cancer. Although in modern times technology provide us essential information about the disease, but we cant keep individual's personal and social context away from the disease like cancer (Bowling, 1995).

The identification of cancer is said to have the utmost possibility of altering psychological functioning of a patient (Polsky *et al.*, 2005) [24]. Previous studies have shown that psychological distress connected with cancer has labelled it as the sixth fundamental indication in cancer care (Carlson,

Groff, Maciejewski, & Bultz, 2010) [4]. Even if psychological distress following the identification of cancer is expected, the appraisal and supervision of patients' psychological requirements have remained as a challenge right through the cancer journey (Absolom *et al.*, 2011; Merckaert *et al.*, 2010) [1, 20].

The literature has recognized multiplicity of personal, environmental and behavioural factors to predict and interpret mental adjustment to cancer (Akechi, Kugaya, *et al.*, 1998 [2]; Hulbert-Williams, Neal, Morrison, Hood, & Wilkinson, 2012) [16], but the integrated role of perceived social support and meaning in life is not clearly evident.

The available empirical and theoretical research studies have shown that social support has played an important role in enhancing physical and mental health of the patients suffering from chronic illnesses (Barrera, 2000; Uchino, 2004; Wills & Shinar, 2000) [3, 31, 34]. Furthermore, many researchers have found that higher levels of perceived social support are linked with better mental adjustment (Eom *et al.*, 2013; Grassi, Rosti, Lasalvia, & Marangolo, 1993 [9, 13]; Helgeson *et al.*, 2004; Inoue *et al.*, 2003) [14, 17]. The presence of supportive

interpersonal relationships has the potential to influence well-being in cancer survivorship (Schroevers, Helgeson, Sanderman & Ranchor, 2013) [25], and it is also shown to be significant mediators of optimistic and positive affect (Hodges & Winstanley, 2012) [15]. Social support has always been recognized as a powerful weapon for dealing with the challenges and stresses of life. It has been considered as a driving force for maintain health and wellness in all cultures of the world (Dollete *et al.* 2004) [8].

The emergence of meaning as an important variable has been come out by the Frankl's (1963) [10] work, particularly Man's Search for Meaning (Wong & Fry, 1998) [35]. Meaning in life is not merely a philosophical or theoretical construct but human health and well-being is solely dependent on its presence and absence. It is asserted that absence of meaning is related to psychopathology. It has been validated in an empirical research that to live without meaning, goals or values provokes considerable distress (Yalom, 1980). Frankl argued that a lack of meaning in life causes a so-called existential vacuum. Frankl's philosophy asserts that one has to be conscious that life has meaning under all circumstances in order to have a positive view of life and that all people have the capacity and ability to find meaning in their lives. It is outcome of successful efforts of Steger and colleagues (2006) who made it possible to clarify the concept by distinguishing between two components of meaning in life. The first aspect, Presence of Meaning, indicates whether individuals perceive their lives as significant and purposeful. The term refers to the comprehension of oneself and the surrounding world, including the understanding of how one fits into the world (King, Hicks, Krull & Del Gaiso, 2006) [18]. The second aspect, Search for Meaning, refers to the strength, intensity, and activity of people's efforts to establish or increase their understanding of the meaning and purpose of their lives ("how can I make my life more meaningful?") (Steger, Kashdan, Sullivan & Lorentz, 2008) [29]. In sum, whereas the 'Presence of Meaning' dimension implies some kind of outcome, the 'Search for Meaning' dimension refers to an active and process-oriented factor.

There is an ongoing debate on the possible impacts of perceived social support and meaning in life on fatalism (Nordin & Glimelius, 1998) [22]. The correlation between mental adjustment and death, and survival and recurrence is controversial (Cordova *et al.*, 2003 [5]; Grassi, Travado, Moncayo, Sabato, & Rossi, 2004).

Keeping the above facts into consideration, researchers have tried to find out the influence of perceived social support and meaning in life in fatalism among cancer patients.

Objectives

1. To study the nature of relationship of perceived social support and its dimensions, i.e. (Support from family, support from friends and support from significant others) with fatalism among cancer patients.
2. To study the nature of relationship of meaning in life and its dimensions, i.e. (Presence of Meaning in Life and Search for meaning in life) with fatalism among cancer patients.
3. To examine perceived social support and meaning in life as predictors of fatalism among cancer patients.

Hypotheses

- H1:** There will be significant relationship of overall perceived social support and its dimensions, i.e. (support from family, support from friends and support from significant others) with fatalism among cancer patients.
- H2:** There will be significant relationship of overall meaning in life and its dimensions, i.e. (presence of meaning in life and search for meaning in life) with fatalism among cancer patients.
- H3a:** Perceived social support and its dimensions (Support from family, support from friends and support from significant others) will emerge as significant predictors of fatalism dimension of mental adjustment among cancer patients.
- H3b:** Meaning in life and its dimensions (presence of meaning in life and search for meaning in life) will emerge as significant predictors of fatalism dimension of mental adjustment among cancer patients.
- H3c:** Perceived social support and meaning in life will emerge as significant predictors of fatalism dimension of mental adjustment among cancer patients.

Methodology

Sample

The sample of the present study consisted of 200 cancer patients who were selected on purposive basis from Shri Maharaja Hari Singh Hospital Srinagar, J&K and Jawahar Lal Nehru Medical College, Aligarh, Uttar Pradesh.

The Inclusion criteria were

Patients aware of the diagnosis of cancer
30 years of age or older
Able to consent to the study and independently complete questionnaires

The Exclusion criteria were

Severe physical or mental impairments
Previous history of malignant disease
Those who were not able to give the consent and participate as per their interests.

Research Design

The study used a correlation design, examining the relationship of two independent variables, i.e. Perceived Social Support and Meaning in Life With Fatalism (dependent variable). The data collected is analyzed using Pearson's product moment correlation to know the correlation between the variables and regression analysis was used to know the prediction value of independent variables.

Tools Used

Meaning in Life Questionnaire (MLQ)

The Meaning in Life Questionnaire (MLQ) was developed by Steger, Frazier, Oishi and Kaler (2006). It is a 10-item self-report inventory designed to measure life meaning. It measures two dimensions of meaning in life: (1) Presence of Meaning (how much respondents feel their lives have meaning), and (2) Search for Meaning (how much respondents strive to find meaning and understanding in their lives). Respondents answered each item on a 7-point Likert-type

scale ranging from 1 (Absolutely True) to 7 (Absolutely Untrue). Scoring is kept continuous; Items 1, 4, 5, 6, & 9 make up the Presence of Meaning subscale. Items 2, 3, 7, 8, & 10 make up the Search for Meaning subscale, Item 9 is reverse score. The MLQ has good internal consistency, with coefficient alphas ranging in the low to high. 80 for the Presence subscale and mid. 80 to low. 90 for the Search subscale.

Multidimensional Scale of Perceived Social Support scale (MSPSS)

The Multidimensional Scale of Perceived Social Support scale (MSPSS) was developed by Zimet (1988) [38] to measure social support. The MSPSS is a 12-item scale, self-report instrument. It measures individuals social support from three specific areas namely family, friends, and significant others. Each of the 3 areas has 4 subscales. Items were measured on 7- point Likert-type scale from 1 ‘very strongly disagree’ to 7 ‘very strongly agree’. The MSPSS evaluates perceived social support (PSS) from family (FA), friends (FR), and significant others (SO) and quantifies the degree to which respondents perceive support from each of these three sources, namely FA, FR and SO.

Mini-Mac Scale

The Mental Adjustment to Cancer Scale (Watson *et al.*, 1988) [32] was designed to provide a method of assessing specific responses to cancer. The aim was to develop a self-rating questionnaire acceptable to cancer patients, which could be administered easily during busy oncology clinics. The MAC Scale does not attempt to measure every possible coping response; a detailed exposition of a more complex rating method has been described elsewhere (Morris *et al.*, 1985) [21]. The Mini-Mental Adjustment to Cancer Scale (Mini-MAC) was extracted from the MAC which it has still five sub-scales and is now often used in preference to MAC in clinical settings due to brevity. The Mini-MAC is a 29-item self-rating questionnaire developed in response to the limitation of the original MAC Scale (Watson *et al.*, 1994) [33]. This questionnaire included the same five dimensions but fewer items for ‘fighting spirit’ (4 questions), ‘hopelessness/helplessness’ (8 questions), ‘anxious preoccupation’ (8 questions), ‘fatalism’ (5 questions) and ‘cognitive avoidance’ (4 questions). For present study only the scores of the fatalism were taken into consideration.

Procedure

These three measures were in printed form and were administered on each selected subject by assuring them that information provided by them will be kept strictly confidential. Having obtained the data from the subjects, the data were tabulated for giving statistical treatment for obtaining the results.

Statistical Analysis

The information/responses collected from the respondents were subjected to various statistical treatments. The data was analysed by using Statistical Product and Service Solutions

(SPSS 16.0). Statistical techniques used for analyzing data were: correlation and stepwise regression analysis. Pearson’s product moment correlation was used to study correlation of perceived social support and meaning in life with fatalism and stepwise multiple regression analysis was used to understand the role of perceived social support and meaning in life in predicting fatalism among cancer patients.

Results and Discussion

Table 1: Showing Pearson’s Correlation Coefficient(r) between Perceived Social Support and its dimensions with Fatalism

Variables	R
Support From Family	
	.354**(p = <0.005)
Fatalism (Y1)	
Support From Friends	
	.229**(p = <0.005)
Fatalism (Y1)	
Support From Significant Others	
	.318**(p = <0.005)
Fatalism (Y1)	
Overall Perceived Social Support	
	.416**(p = <0.005)
Fatalism (Y1)	

**P<0.05 Level of significance, Y1=Fatalism, X1=Support from Family, X2= Support from Friends, X3=Support from Significant Others, X4=Total Perceived Social Support

Table 1 Shows significant positive correlation between support from family (X1)and fatalism(Y1) (r=.354, p>.001); support from friends (X2) and fatalism(Y1) (.229p>.001); support from significant others (X3) and fatalism(Y1) (r=.318, p>.001) and between overall perceived social support (X4) and fatalism(Y1) (r=.416, p>.001). Findings indicate as perceived social support and its dimensions increases in cancer patients their fatalism also increases and vice-versa. Thus, our hypothesis H_{A1} stating that “there will be significant relationship of overall perceived social support and its dimensions, i.e. (support from family, support from friends and support from significant others) with fatalism among cancer patients” stands accepted.

Perceived social support enhances the strenght of cancer patients and helps them to develop positive adjustment qualities in order to tackle the challenges which they face due to cancer. Support from family members, friends and significant others prove very helpful for cancer patients in the times of their illness. This support acts as a booster for those patients. It strenthens their morale and makes them enough strong, tolerant and knowledable. The findings of the present can be corroborated with the findings of Yagmura and Dumanb (2016) [36] which proves that perceived social support and its dimensions were positively correlated with fighting spirit and negatively correlated with helplessness/hopelessness. Moreover, the study conducted by Kinsinger, Laurenceau, Carver and Antoni (2011) [18] is also in line with the present findings as they found the perception of emotional, instrumental and informational support facilitatess adjustment and the bond of happiness among cancer patients.

Table 2: Showing Pearson’s Correlation Coefficient(r) between Meaning in Life and its dimensions with Fatalism

Variables	R
Presence of Meaning in Life	
Fatalism (Y1)	.426** (p = <0.005)
Search for Meaning in Life	
Fatalism (Y1)	-.241** (p = <0.005)
Overall Meaning in Life	
Fatalism (Y1)	.274** (p = <0.005)

**P<0.05 Level of significance, Y1=Fatalism, X5= Presence of Meaning in Life, X6= Search for Meaning in Life, X7=Total Meaning in Life score.

The table 2 depicts that there exists a positive relationship between overall meaning in life (X7) and fatalism(Y1) (r=.274, p>.001) and between presence of meaning in life (X5) and fatalism(Y1) (r=.426, p>.001) *indicating more the level of presence of meaning in life and overall meaning in life, more is fatalism and vice-versa among cancer patients.* The table further reveals that there was a significant negative correlation between search for meaning in life (X6) and fatalism(Y1) (r=-.241p>.001) among cancer patients, *indicating more there is search for meaning in life, less is fatalism and vice-versa.* Thus, our hypothesis H_{A2} stating that “there will be significant relationship of overall meaning in life and its dimensions, i.e. (presence of meaning in life and search for meaning in life) with fatalism among cancer patients” stands partially accepted.

Overall meaning in life and presence of meaning in life seem to be crucial for fatalism among cancer patients. These attributes safeguard cancer patients from negative effects of the illness and boost their morale. The overall meaning in life as well as presence of meaning in life enhance the positive adjustment behaviors among cancer patients. There are many research studies which are in line with the present research findings. Studies conducted by (Park, Edmondson, Fenster

and Blank, 2008 [23]; Yanez, Edmondson, Stanton, Park, Kwan, Ganz, and Blank, 2009 [37] and Sherman, Simonton, Latif, and Bracy, 2010) [27] found that cancer patients with higher meaning in life reported improved quality-of-Life, higher well-being, and lower levels of depressive symptoms and fatigue. Moreover, Steger, (2012) in a study found that presence of meaning in life is significantly related with psychological wellbeing of a person.

On the other hand, significant negative correlation was found between search for meaning in life (X6) and fatalism (Y1). There are several studies which are support our findings. For example, Dezutter, Luyckx, and Wachholtz (2015) [6] carried out a study on chronic pain patients and found presence of Meaning was positively associated with life satisfaction and search for Meaning in life was positively related to depressive symptoms at every time point. Moreover, Scrignaro, *et al.*, (2015) [26] carried out a study on 266 cancer patients and found that the presence of meaning totally or partially mediated the effect of the search for meaning on both mental adjustment and eudaimonic well-being. Further correlation analyses showed a high negative correlation between eudaimonic well-being and hopelessness.

Table 5: Showing the results of stepwise multiple linear regression analysis by considering perceived social support and meaning in life as predictors of ‘fatalism’ dimension of mental adjustment among cancer patients.

Predictor	B	β	R	R ²	ΔR ²	f ²	t	F	df	p
Perceived Social Support (Model Y ₁ = a + β ₄ X ₄)										
X ₄	.130	.416	0.416	0.173	-	0.209	6.436	41.417	(1,198)	0.000
Constant	7.092									
Meaning in Life (Model Y ₁ = a + β ₅ X ₅)										
X ₅	.223	.426	0.426	0.181	-	0.22	6.618	43.801	(1,198)	0.000
Constant	8.707									
Perceived Social Support and Meaning in Life (Model Y ₁ = a + β ₅ X ₅ +β ₄ X ₄)										
X ₅	.148	.283	0.426	0.181	-	0.22	3.779	43.801	(1,198)	0.000
X ₄	.081	.261	0.478	0.229	0.048	0.297	3.439	29.298	(2,197)	0.001
Constant	6.570									

**p<0.01 (1-tailed), Predictor Variables: X₄=Total Perceived Social Support, X₅= Presence of Meaning in Life; Criterion Variable: Y₁=Fatalism.

Perceived social support and its’ dimensions were considered as predictors and fatalism (dimension of mental adjustment) as criterion to develop a regression model. Total perceived social support (X₄) passed on the criteria and accounted for a significant amount of variance in fatalism (Y₁), R² = 0.173, F(1, 198) = 41.417, p < 0.001. It can be inferred that total

perceived social support (X₄) explained 17.3% variance in fatalism (Y₁) of cancer patients. Therefore, H_{3a} is supported. At the p < 0.001 level of significance; there exists enough evidence to conclude that the slope of the regression line is not zero and, hence, that total perceived social support is significant predictor of fatalism of cancer patients. It suggests

that changes in predictor are associated with changes in the criterion variable. Further, Cohen's effect size value ($f^2 = 0.209$) suggested a medium strength of association between perceived social support and fatalism.

Secondly, meaning in life and its dimensions were considered as predictors and fatalism as criterion to develop a regression model. Presence of meaning in life ($X5$) passed on the criteria and accounted for a significant amount of variance in fatalism ($Y1$), $R^2 = 0.181$, $F(1, 198) = 43.801$, $p < 0.001$. It can be inferred that presence of meaning in life ($X5$), explained 18.1% variance in fatalism of cancer patients. Therefore, $H3b$ is partially supported. At the $p < 0.001$ level of significance; there exists enough evidence to conclude that the slope of the regression line is not zero and, hence, that presence of meaning in life is a significant predictor of fatalism of cancer patients. It suggests that changes in predictor are associated with changes in the criterion variable. Further, Cohen's effect size value ($f^2 = 0.22$) suggested a medium strength of association between presence of meaning in life and fatalism. Finally, perceived social support and meaning in life were considered as predictors and fatalism as criterion to develop a regression model. Total perceived social support and presence of meaning in life passed on the criteria and accounted for a significant amount of variance in fatalism, $R^2 = 0.229$, $F(1, 197) = 29.298$, $p < 0.001$. It can be inferred that total perceived social support and presence of meaning in life explained 22.9% variance in fatalism of cancer patients. However, total perceived social support alone explained 18.1% and presence of meaning in life 4.8% variance in fatalism. Therefore, $H3c$ is partially supported. At the $p < 0.001$ level of significance; there exists enough evidence to conclude that the slope of the regression line is not zero and, hence, that total perceived social support and presence of meaning in life are significant predictors of fatalism in cancer patients. It suggests that changes in predictor are associated with changes in the criterion variable. Further, Cohen's effect size value ($f^2 = 0.297$) suggested a medium but very close to large strength of association of total perceived social support and presence of meaning in life with fatalism.

The largest Beta value (in the 3rd model) of presence of meaning in life ($\beta = .283$, $t = 3.779$, $p < .0001$) suggests that it made the strongest unique contribution in explaining fatalism and; the Beta value of total perceived social support was slightly lower ($\beta = .261$, $t = 3.439$, $p < .001$) which suggests that it made less of a contribution. On the basis of the significance level of the standardized beta value, it can be concluded that perceived social support and presence of meaning in life made a unique and statistically significant contribution to the prediction of fatalism among cancer patients. However, many other factors can influence the fatalism which are not purview of this piece of research work.

It is important to mention that fatalism is the belief that cancer diagnosis is a matter of fate and therefore beyond the individual's control. Both perceived social support and presence of meaning in life have always been considered as the boosting forces for a human being. Both of them help a person to accept the reality as it is and at the same time helps a person to remain balanced in the worst times of the life. Goodwin *et al.*, (2002) ^[11] carried out a study and found

significant positive correlation between perceived social support and fatalism. Moreover, these authors has also come to conclusion that social support acted as a moderator for fatalism as well as for mental health. Emotional support from family and friends, informational support from personal physicians, as well as social background factors (education, ethnicity, income, and age) were found significantly correlated to fatalism (Straughan and Seow 1998) ^[30]. Presence of meaning in life in the bad times has always been considered as a strong tool to deal with the adversities of life. Presence of meaning in life has been found an important factor for the psychological adjustment among the patients who were suffering from pain (Dezutter, Luyckx, and Wachholtz, 2015) ^[6]. Moreover, (Bulman 2004) have also found that meaningfulness in life helps an individual to cope with severe stressors of life.

Implications of the study

Perceived social support, presence of meaning in life and fatalism can improve well-being of the cancer patients by:

- Eliminating the levels of anxiety, stress, depression, loneliness and other psychological problems.
- Teaching them how to become psychologically strong
- Uplifting their personal growth and self-awareness
- Decreasing their feelings of isolation, rejection and loneliness
- Improving their sense of attachment with others and secure feelings
- Increasing their adherence to positive adjustment strategies like fatalism.
- Guiding them towards finding meaning in life and escalating their determination to live.

Limitations of the study

- a. The major limitation of the study is that the target population was sensitive that had effect on objectivity of study.
- b. The selected sample group was heterogeneous with respect to their educational status which may have resulted in variation of responses.
- c. Another limitation is that minimal demographic data were collected for the sample in this study. Information regarding the financial status, marital status, type of cancer, and educational qualification would also have been important variables to include in the analysis. For instance, not knowing whether cancer patient was a married or unmarried concealed any possible influence marriage would have on patient's life.
- d. Keeping in view the nature of the target population, combination of qualitative and quantitative research would have been more appropriate and much informative as compared to quantitative study.

Suggestions for Future Research

- a. There is much scope to conduct further research on perceived social support, meaning in life and fatalism among cancer patients in order to recognize the pathways in which these variables are related in this population. This study provides the groundwork for further

exploration. Further research should include a qualitative component, which would provide the opportunity to learn more about the lived experience cancer patients.

- b. Future studies should involve a larger and more diverse group of cancer patients, including a more ethnically and racially diverse sample. This would allow further study of the ways that culture and ethnicity play a role in perceived social support, meaning in life and mental adjustment among cancer patients.
- c. Alternative research techniques should be used by future researchers to authenticate the results. Moreover, Short versions of scales and questionnaires and adequate sample size should be preferred by future researchers.

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