

Hopelessness, Perceived Social Support and their Relationship in Iranian Patients with Cancer

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ABSTRACT

Objective: Cancer is considered a global health problem and its prevalence has been growing in recent years. The present study was conducted to investigate the role of hopelessness and perceived social support for Iranian patients with cancer. **Methods:** Convenience sampling was used to select the study sample comprising 100 patients with cancer presenting to the Education and Treatment Center of Valiasr in Zanjan, Iran. A demographic questionnaire, the Beck Hopelessness Scale, and the Social Support from Family and Friends Scale were used to collect the data. Collected data were analyzed using SPSS-16. **Results:** Of the 98 study patients, 52 (53.1%) were female and the remainder were male. Lung cancer constituted the most prevalent type of cancer (25.5%). The mean hopelessness score was 5.93 ± 4.71 . The

mean scores for social support provided by family and friends were 10.89 ± 5.61 and 14.94 ± 4.16 , respectively. Significantly negative correlations were observed between the mean scores of hopelessness and social support provided by family ($P = 0.007$; $r = -0.270$) and friends ($P = 0.001$; $r = -0.327$). **Conclusion:** According to the findings of the present study, Iranian patients with cancer have relatively mild levels of hopelessness and moderate levels of social support. Perceived social support was also found to affect the patients' hopefulness. Given the lack of studies on this subject, it is recommended that further studies are performed.

Key words: Cancer care, developing country, hopelessness, social support

Introduction

Cancer is considered a global health problem and its prevalence has been growing in recent years.^[1] Cancer is

the second leading cause of mortality after cardiovascular diseases. According to the American Cancer Society report,

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1,658,210 new cancer cases were predicted to be diagnosed in the US in 2016, which is equivalent to 4600 news cases per day.^[2] By 2020, an estimated 17.1 million people will likely be living with cancer.^[1] Although there are no accurate records on the prevalence of cancer in Iran, the results of regional studies suggest a growing rate of emergence for most types of cancer.^[3]

The life expectancy of patients with cancer has increased in recent years, thanks to technological advancements in the medical sciences. Nevertheless, patients' quality of life is often poor due to chronic morbidity and related problems. These problems include a lack of therapeutic responses to treatment, fear, and anxiety caused by the prospect of disease recurrence, high cost of treatment, side effects of the treatment (chemotherapy, and radiotherapy often have painful and stigmatizing side effects), reduced life expectancy, and physical and psychological distress. Hope plays a key role in the life of these patients and their families.^[4] It is a critical factor in predicting the adaptability of patients with cancer to the nature of the disease and its treatment, especially when faced with the prospect of chronic pain.^[5] A lack of hope or hopelessness can threaten a patient's physical and psychological well-being.^[6] One study in this regard, Yildirim *et al.* examined hopelessness and its related factors in a group of patients with cancer in Turkey. Patients in this study reported moderate levels of hopelessness. The results revealed that cancer metastasis, pain intensity, anxiety, and depression levels significantly affect patients' hopelessness levels.^[7]

Another major issue for patients with cancer is the availability and perception of social support. Stress related to an uncertain future causes patients to often begin looking for additional sources for support.^[8] The availability of social support is considered a significant coping resource that can help the patient endure living with cancer, as well as cope with many of the stresses that come with the disease and its treatment. Social support also reduces the experience of tension, increases the survival rate, improves health status, and enhances the patient's quality of life.^[9]

Previous studies among patients with other illnesses revealed that social support affected patients' hope. For example, in one study, Beedie and Kennedy examined perceived social support and hopelessness in one group of patients with spinal cord injury. Their study revealed that perceived social support by patients affects their levels of hopelessness.^[10] In a similar study, Bayat *et al.* examined hopelessness and social support levels among parents of children with cancer. Results of their study showed that hopelessness is less prevalent among parents with higher levels of social support.^[11]

Given the crucial role of hope and social support in the lives of patients with cancer, there is a wealth of

research already published in this field, especially studies that examined their relationships. Nonetheless, there is a paucity of literature describing the plight of patients with cancer in developing countries, such as Iran. The present study, therefore, was conducted to investigate the role of hopelessness and perceived social support for Iranian patients with cancer.

Methods

The present descriptive correlational study was conducted in Iran. The study was approved by the Ethics Committee of Zanjan University of Medical Sciences. Participants were also asked to sign a consent form.

The inclusion criteria were: participants were at least 18 years of age, free of psychological and psychiatric disorders, diagnosed at least 4 months before the study, patients at the end stage of the disease, hospitalized, and receiving treatment. Patients were deemed to have satisfied the exclusion criteria if they chose to withdraw from the study or treatment, if they experienced any sudden or undesirable adverse effects that might negatively affect the results of the study, or underwent a sudden exacerbation of the disease. Convenience sampling was used to recruit the participants comprising 100 patients with cancer presenting to the Education and Treatment Center of Valiasr in Zanjan, Iran (at the time of the study, we had 125 registered patients in our institute).

A demographic questionnaire, the Beck Hopelessness Scale (BHS), and the Social Support from Family and Friends Scale were used to collect the data. The demographic information questionnaire recorded personal details about the participants, including their age, gender, marital status, level of education, place of residence, occupational status, family size, monthly income, insurance status, type of treatment, disease recurrence status, and cancer type. The 20-item BHS was designed by Beck *et al.* for use with 17–80 years old.^[12] The questionnaire measures three aspects of hopelessness: (a) feelings about the future, (b) loss of motivation, and (c) expectations. Respondents rate items using “Yes” or “No” for a total score of 0–20. Higher scores denote greater hopelessness (scores of 0–3 indicate a minimal sense of hopelessness, 4–8 mild hopelessness, 9–14 moderate hopelessness, and 15–20 denotes a severe degree of hopelessness). A previous study indicated that the validity and reliability of the Persian version of this instrument were acceptable.^[13]

The social support from family and friends scale also contains 20 items and measures the degree of social support received by patients with cancer from their family and friends. Each item consists of a declarative statement to which the person responds with “Yes,”

“No,” or “Don’t know.” The total score ranges from 0 to 20. Higher scores suggest higher levels of social support. A previous study reported Cronbach’s alpha values of 0.88 and 0.90 for the social support from family and friends subscales, respectively. Validity and reliability of the Persian version of this instrument were shown to be good.^[14]

After briefing the head nurse of the oncology department on the objectives of the study, sampling procedures, and questionnaire completion method, arrangements were made with the head nurse to commence sampling with patients. The researcher and head nurse identified potential candidates for inclusion in the study before explaining the objectives of the study to the candidates. Participants indicated their informed consent to participate in the study by signing consent forms. To avoid biased results from the effects of the treatment, candidates were only asked to participate in the study if their general health was appropriate. Follow-up sessions were held in the health center. The researcher distributed the demographic information questionnaire, BHS, and social support from family and friends scale to the patients during these sessions. In cases where the patient was illiterate, the items were read aloud by the researcher with a necessary explanation provided for the participant, and their responses were marked in the questionnaire.

Collected data were analyzed using IBM SPSS-16. To classify and summarize the findings, descriptive statistics – including tables of absolute and relative frequency, means, and standard deviations – were used. Inferential statistics, such as the Pearson correlation coefficient, independent *t*-test, and one-way ANOVA, were used to determine the relationships between unofficial social support provided by family and friends, hopelessness, and respondents’ demographic data; and between respondents’ demographic data and hopelessness.

Results

Two of the 100 questionnaires that were administered were incomplete and discarded from the analysis, thus leaving a sample of 98 completed questionnaires. Of the 98 study patients, 52 (53.1%) were female. Close to 40% of the participants were older than 60, and 80% were married. Approximately half of the participants were illiterate, and about 84% were covered by state insurance. In terms of treatment, 39.8% of the sampled patients were undergoing only chemotherapy, and 12.2% only radiotherapy, while the remaining participants were undergoing both treatments. In total, 36.7% of the sample had experienced disease recurrence. Lung cancer constituted the most prevalent type of cancer (25.5%), and laryngeal cancer was the least prevalent (1.1%).

Hopelessness

The mean hopelessness score was 5.93 ± 4.71 . Disease recurrence was the only demographic variable associated with the patients’ level of hopelessness. The mean score of those patients with a recurrence of cancer was 7.50 ± 5.40 , compared to the mean score of 5.03 ± 4.04 for patients without recurrence ($P = 0.012$) [Tables 1 and 2].

Social support provided by family and friends

The mean scores for social support provided by family and friends were 10.89 ± 5.61 and 14.94 ± 4.16 , respectively. Insurance status and marital status were demographic variables positively correlated with the level of social support. Patients with state insurance received a greater level of social support. Moreover, married participants were found to receive higher levels of social support than single participants [Tables 1 and 2].

Relationship between hopelessness and social support provided by family and friends

Significantly negative correlations were observed between the mean scores of hopelessness and social support provided by family ($P = 0.007$; $r = -0.270$) and friends ($P = 0.001$; $r = -0.327$). Table 3 shows correlations between the hopelessness domains (feelings about the future, loss of motivation, and expectations) and social support provided by family and friends.

Discussion

The aim of the present study was to answer three questions: (a) What is the level of hope among Iranian patients with cancer? (b) What is the level of social support received from the family and friends of Iranian patients with cancer? and (c) Is there a relationship between the level of hope and the level of social support received by these patients? The results of this study suggest that Iranian patients with cancer enjoy relatively mild levels of hopelessness. (The mean hopelessness score was 5.93 ± 4.71 . For this measure, scores of 0–3 indicate a minimal sense of hopelessness, 4–8 mild hopelessness, 9–14 moderate hopelessness, and scores higher than 14 indicate a severe degree of hopelessness.) Moreover, the Iranian patients with cancer exhibited moderate levels of social support. (The mean scores for social support provided by family and friends in our study were 10.89 ± 5.61 and 14.94 ± 4.16 , respectively. Total scores in this section ranged from 0 to 20.) Higher levels of perceived social support were also associated with higher levels of hope in these patients.

Hope is an inner force that enriches the patient’s life and facilitates optimism in the face of illness, pain, and prospect of mortality.^[5] Given the nature of cancer, hope is an important coping mechanism for these patients,

Table 1: Effect of demographics characteristics on hopelessness and perceived social support (Mean±SD)

Item	Social support provided by family	P	Social support provided by friends	P	Hopelessness	P
Gender						
Male	11.41±5.93	0.383	15.07±4.41	0.779	6.08±5.12	0.772
Female	10.42±5.32		14.83±3.93		5.80±4.37	
Age (yr)						
18-39	11.29±5.16	0.646	14.88±4.34	0.993	5.95±4.79	0.999
40-59	10.17±5.76		14.91±4.73		5.91±5.19	
60 and higher	11.28±5.83		15.01±3.56		5.94±4.32	
Marital status						
Married	11.58±5.42	0.042	15.16±4.11	0.50	5.43±4.61	0.090
Single	7.56±5.82		14.57±4.07		8.42±4.07	
Education level						
Illiterate	10.23±5.60	0.284	14.46±4.20	0.479	6.35±4.73	0.209
Elementary	9.76±5.10		15.88±2.61		6.82±4.74	
Under diploma	12.30±5.94		14.10±5.30		6.60±4.29	
Diploma and higher	12.48±5.82		15.61±10.50		4.13±4.66	
Insurance						
Yes	11.52±5.47	0.010	15.34±3.95	0.029	5.84±4.74	0.646
No	7.62±5.30		12.88±4.73		6.43±4.45	
Treatment						
Chemotherapy	11.08±4.87	0.787	15.10±3.67	0.709	5.92±4.18	0.661
Radiotherapy	9.83±7.54		14.01±5.64		4.83±4.46	
Both	11.01±5.72		15.04±4.18		6.23±5.26	
Recurrence						
Yes	9.88±5.50	0.169	15.31±4.02	0.509	7.50±5.40	0.012
No	11.48±5.50		14.73±4.26		5.03±4.04	

Table 2: Effect of type of cancer on hopelessness and perceived social support (Mean±SD)

Type of cancer	Social support provided by family	P	Social support provided by friends	P	Hopelessness	P
Lung	9.88±6.01	0.446	13.32±5.51	0.166	5.68±4.66	0.490
Liver	14.01±4.21		18.50±0.70		3.01±2.82	
Brest	10.01±5.30		15.87±2.97		4.06±2.67	
Prostate	11.71±5.73		16.86±2.41		4.42±5.47	
Intestine	13.01±4.77		15.78±3.34		7.11±4.28	
Blood	11.50±7.10		15.10±4.48		7.30±6.32	
Lymphoma	11.01±5.35		16.29±1.70		4.49±3.62	
Gastric	9.08±5.28		12.25±4.45		8.91±5.85	
Bone	14.01±2.01		16.33±0.57		5.01±2.00	
Pancreas	14.01±7.07		18.01±1.48		6.50±7.77	
Larynx	18		18		8	

Table 3: Correlations between hopelessness domains and social support provided by family and friends

Items	Family social support	Friends social support
Feelings about the future	$r = -0.195, P = 0.064$	$r = -0.378, P < 0.001$
Loss of motivation	$r = -0.311, P = 0.003$	$r = -0.508, P < 0.001$
Expectations	$r = -0.258, P = 0.015$	$r = -0.415, P < 0.001$

often helping them adapt to the disease. Hope plays a key role in the life of these patients and their families.^[4] The results of the present study demonstrate relatively good levels of hope among the Iranian patients with cancer. Nonetheless, there is a paucity of literature exploring hope

in the context of Iranian patients with cancer. Baljani *et al.* investigated hope among a group of 115 Iranian patients with cancer using the Herth Hope Scale. The researchers found relatively high levels of hope among those sampled, which is consistent with the present study. They also showed that patients' sense of hope was influenced by factors such as financial status, occupational status, lifestyle, activity level, physical strength, and sleep disorders.^[15] In another study, Abdullah-Zadeh *et al.* examined hope among 50 Iranian patients with cancer. Consistent with the present study, Abdullah-Zadeh *et al.* observed relatively high levels of hope among a sample of Iranian patients with cancer.^[16]

Hope can improve the psychological status of patients with cancer and thus, their quality of life, which is already affected by the disease, treatment, and therapeutic complications.^[17] Hopelessness is considered a nursing diagnosis^[18] and given the importance of hope in patients with cancer, it is recommended for nurses taking care of these patients to examine and identify patients at risk for hopelessness. Nurses should also be familiar with solutions for improving hope in patients with cancer. These solutions include establishing effective therapeutic relationships with the patient, providing them with adequate information about their disease and its treatment, teaching the patients different solutions for adapting to the disease and its symptoms, increasing the patients' involvement in the treatment process, referring the patient to support groups for patients with cancer, providing patients with spiritual care and psychological counseling, and referring them to psychologists if needed.

Hope is an important resource, not only for patients with cancer themselves, but also for their family and friends who provide them with social support. The support provided by family, friends, and members of the treatment team plays an important role in helping the patient with cancer to come to terms with the disease and its treatment.^[19] The results of the present study reveal that the level of social support given by friends to patients in the study was relatively good, although only moderate with respect to the support provided by family. In contrast, Naseri and Taleghani in a study of 200 Iranian patients with cancer revealed that close to 95% of patients enjoyed very high levels of social support, as provided by their family, friends, and therapeutic team.^[20] The discrepancies in the results of these studies can be explained by differences in the tools used and in the study settings. The therapeutic and support centers for patients with cancer, found in Iranian urban centers, are simply not available in many small towns. The study by Naseri and Taleghani was conducted in an urban environment.^[20] Given the importance of social support, and its role in reducing stress, anxiety, fear of death, and in improving the patient's quality of life, nurses are required to provide the necessary training for patients and their family members and friends. Nurses can also improve the support provided by family members and friends by enhancing their involvement in the treatment process.

Another objective of the present study was to examine the relationship between hope in patients with cancer and their perceptions of the level of social support that they receive. The results of the present study suggest that social support positively affects the level of hope experienced by these patients. No prior studies addressing this relationship have been performed in Iran; although the few studies that exist, which have been conducted in other

countries, confirm the results of the present study. Tan and Karabulutlu who investigated the relationship between social support and hopelessness in 100 patients with cancer in Turkey found that higher levels of social support among patients with cancer were positively correlated with higher levels of hopefulness and subsequent coping.^[21] In line with the present study, Pehlivan *et al.*, who studied the relationship between social support provided by family with disappointment and loneliness in 188 patients with cancer, observed a positive relationship between perceived social support and hopefulness.^[22] Given the results of the present and previous research, social support appears to play a vital role in helping patients with cancer to cope with and adapt to the disease by giving these patients a sense of hope. According to Azizi and Elyasi, higher levels of social support given to patients with cancer by their family and friends helps these patients express their feelings, concerns, and experiences with the disease more effectively, thereby improving their hope.^[23]

Conclusion

The results of the present study suggest that perceived social support was found to affect patients' hopefulness. The results of this study can be used as a guideline for improving the status of patients with cancer. Given the special condition of these patients, caregivers should look to maximize opportunities for social support. Given the lack of studies on this subject, further studies are recommended. Moreover, social support and hopelessness should be examined at different stages of the disease, including diagnosis, treatment, and follow-up, to determine if these effects are stage specific.

Limitations

The small sample size and the sampling method limit the generalizability of the findings of the present study. We did not use a sample size formula to determine optimal sample size.

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Conflicts of interest

There are no conflicts of interest.

References

1. Coyne JW. The first oral fixed-dose combination of netupitant and palonosetron for the treatment of chemotherapy-induced nausea and vomiting. *J Adv Pract Oncol* 2016;7:66-70.
2. Siegel RL, Miller KD, Jemal A. Cancer statistics, 2016. *CA Cancer J Clin* 2016;66:7-30.
3. Rafiemanesh H, Rajaei-Behbahani N, Khani Y, Hosseini S, Pournamdar Z, Mohammadian-Hafshejani A, *et al.* Incidence

- trend and epidemiology of common cancers in the center of Iran. *Glob J Health Sci* 2015;8:146-55.
4. McClement SE, Chochinov HM. Hope in advanced cancer patients. *Eur J Cancer* 2008;44:1169-74.
 5. Abdi N, Taghdisi M, Naghdi S. The effects of hope promoting interventions on cancer patients. A case study in Sanandaj, Iran, in 2007. *Armaghane Danesh* 2009;14:13-21.
 6. Grassi L, Travado L, Gil F, Sabato S, Rossi E, Tomamichel M, *et al.* Hopelessness and related variables among cancer patients in the Southern European psycho-oncology study (SEPOS). *Psychosomatics* 2010;51:201-7.
 7. Yildirim Y, Sertoz OO, Uyar M, Fadiloglu C, Uslu R. Hopelessness in Turkish cancer inpatients: The relation of hopelessness with psychological and disease-related outcomes. *Eur J Oncol Nurs* 2009;13:81-6.
 8. Chi GC. The role of hope in patients with cancer. *Oncol Nurs Forum* 2007;34:415-24.
 9. Heiydari S, Salahshorian A, Rafie F, Hoseini F. Correlation of perceived social support and size of social network with quality of life dimension in cancer patients. *Feyz* 2008;12:15-22.
 10. Beedie A, Kennedy P. Quality of social support predicts hopelessness and depression post spinal cord injury. *J Clin Psychol Med Settings* 2002;9:227-34.
 11. Bayat M, Erdem E, Gül Kuzucu E. Depression, anxiety, hopelessness, and social support levels of the parents of children with cancer. *J Pediatr Oncol Nurs* 2008;25:247-53.
 12. Beck AT, Steer RA, Kovacs M, Garrison B. Hopelessness and eventual suicide: A 10-year prospective study of patients hospitalized with suicidal ideation. *Am J Psychiatry* 1985;142:559-63.
 13. Zahra P, Khadigeh D, Mogtaba Y, Hossein T, Hamideh D. Study of the rate of hopelessness and its associated factors in Youth of Yazd city, Iran. *Procedia Soc Behav Sci* 2010;5(Suppl C):2108-12.
 14. Safarinia M, Hezareei D. Surveys the educational adaptability of the students in the first to fourth years of study and its relation with family and friends social protection. *Educ Psychol* 2008;4:1-15.
 15. Baljani E, Arax M, Mohammad Alizadeh S. Evaluation of hope in patients with cancer in hospital of Shahid Gazie's Tabrize. *J Nurs Midwifery* 2012;75:1-8.
 16. Abdullah-Zadeh F, Agahosseini S, Asvadi-Kermani I, Rahmani A. Hope in Iranian cancer patients. *Iran J Nurs Midwifery Res* 2011;16:288-91.
 17. Lichwala R. Fostering hope in the patient with cancer. *Clin J Oncol Nurs* 2014;18:267-9.
 18. Bruss CR. Nursing diagnosis of hopelessness. *J Psychosoc Nurs Ment Health Serv* 1988;26:28-31.
 19. Mattioli JL, Repinski R, Chappy SL. The meaning of hope and social support in patients receiving chemotherapy. *Oncol Nurs Forum* 2008;35:822-9.
 20. Naseri N, Taleghani F. Social support in cancer patients referring to Sayed Al-Shohada hospital. *Iran J Nurs Midwifery Res* 2012;17:279-83.
 21. Tan M, Karabulutlu E. Social support and hopelessness in Turkish patients with cancer. *Cancer Nurs* 2005;28:236-40.
 22. Pehlivan S, Ovayolu O, Ovayolu N, Sevinc A, Camci C. Relationship between hopelessness, loneliness, and perceived social support from family in Turkish patients with cancer. *Support Care Cancer* 2012;20:733-9.
 23. Azizi M, Elyasi F. Effective strategies for increasing the hope in patients with cancer: A review. *J Cell Immunother* 2017;3:14-5.