The Effect of a Spiritual Care Program on the Self-Esteem of Patients with Cancer: A Quasi-Experimental Study

Abstract

Background: Despite the importance of self-esteem in cancer patients and the potential role of spiritual care programs in its promotion, no interventional study was found in this field in Iran. The aim of this study was therefore to investigate the effect of a spiritual care program on the self-esteem of patients with various types of cancer. **Materials and Methods:** This study was quasi-experimental with two groups using a before and after design which was conducted in 2019 in a selected hospital in Isfahan, Iran. A convenience sample of 64 patients randomly assigned into the experimental ($n = 32$) and the control group ($n = 32$). Data collection was conducted through a two-part questionnaire including Demographic characteristics and the Coopersmith Self-Esteem Inventory (SEI). The spiritual care program consisted of six sessions based on four domains including individuals' relationship with God, themselves, others, and with the environment. To analyze the data, Chi-square, Fisher's exact test, independent t test, and paired t test were performed. **Results:** The total self-esteem mean score and its domains were not significantly different between the two groups before the intervention ($p > 0.05$). However, after conducting the intervention, the total self-esteem mean score and its domains were significantly higher in the intervention group compared with the control group ($p < 0.001$). **Conclusions:** The spiritual care program used in this study was effective in promoting the self-esteem of patients with cancer. It is suggested that similar studies are conducted to provide fertile grounds for using such programs in the oncology clinical area.

Keywords: *Iran, neoplasms, nursing, palliative care, self esteem , spiritual therapies, spirituality*

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Introduction

Cancer, as an important health issue, causes several negative consequences for patients, including depression, anxiety, body image disturbances, and impaired self-esteem.[1,2] People with low self-esteem might feel worthless leading to several physio-psycho-social problems. Conversely, people with high self-esteem might experience more independence and emotional maturity helping them to identify the meaning of their life and achieve their mission.[3] Therefore, it is necessary to improve the self-esteem of patients with cancer using different ways such as social support, self-care, and spiritual care.[4] Spiritual beliefs are associated with all aspects of one's health and illness which guides one's daily behaviors and are a source of support, strength, and healing.[5] Spiritual care also creates integration between the inner forces of the individual and focuses on the ways through which individuals might adapt to themselves, society, or the environment.[6] Studies have shown that people with high levels of spirituality may have higher well-being and happiness, higher life satisfaction, higher self-esteem, and a quicker adaptation to grief. They might experience lower rates of depression, lower suicide rate, less anxiety, less psychosis, and more marital stability.[7] In spiritual therapy based on promoting self-esteem, methods such as strengthening positive attitudes and creating a good feeling in people could be used.[8]

Several non-interventional research studies related to spiritual care were conducted with patients other than cancer.[9,10] Despite the importance of self-esteem in patients with cancer and the potential role of spiritual care in its promotion, no interventional study was found in this field in Iran based on its specific socio-cultural status. This study was therefore conducted to identify the effect of a spiritual care program on the self-esteem of patients with cancer.

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Materials and Methods

This study was quasi-experimental with two groups using a before and after design which was conducted in a period from 22 November 2019 to 20 January 2020. The study population included different types of patients with cancer referred to Omid Educational and Research Hospital of Isfahan University of Medical Sciences who met the inclusion criteria. Inclusion criteria included outpatients who had 18 to 45 years old, had been informed as having cancer, being a Muslim, 6 months passed after their cancer diagnosis, having no mental illness according to their medical record, experiencing no crisis in recent 6 months such as the death of a close relative or a first-degree family member, being approved by their physician as not having advanced cancer and the ability to read and write in Persian. Exclusion criteria included not a participation in another study related to the variables of the current research and the absence of more than one session out of the six sessions of the interventional program. A convenience sample of 64 patients selected and assigned into the experimental (*n* = 32) and the control group (*n* = 32) using simple random sampling with the help of a table of random numbers. The sample size was calculated considering the test power of 80%, the first type error of 5%, confidence level of 95%, and Z score of 1.96

Data collection was conducted through a two-part questionnaire. The first part was related to demographic characteristics including gender, age, marital status, level of education, occupation, type of cancer, duration of disease, frequency of hospitalization, and type of treatment. The second part was the Coopersmith Self-Esteem Inventory (SEI), which consisted of 58 questions that described a person's feelings, beliefs, or reactions using the yes or no responses across four domains including general, social, family, and educational/occupational.[11] Eight questions are only for verifying participants' responses to other questions leading to the total score of the Inventory ranging from 0 to 50. For the Cooper–Smith self-esteem test, they reported an internal consistency coefficient of 0.86 to 0.90.[12] The reliability and validity of this inventory was also tested with a group of cancer patients in Iran.[13]

The study intervention was a spiritual care program that was planned according to a similar study including six sessions.[14] Three 60-minute face-to-face sessions were performed for the experimental group at MACSA-the Isfahan Brach in Mondays and Wednesdays. MACSA services are a division of "Ala Charity Foundation", which is now available in Isfahan within various centers including outpatient and home care groups. Due to the prevalence of the Covid 19 pandemic during the research process and to follow health protocols, the remained three sessions were conducted virtually using the WhatsApp application. All patients agreed and economically were supported to use WhatsApp as necessary. The content of these virtual sessions was audio-textual which was prepared similar to previous face-to-face sessions. The virtual sessions

were delivered and discussed at predetermined times with the presence of all patients, the main researcher, and the spiritual caregiver later in June 2020.

The spiritual care program was extracted from Islamic texts including the Holy Quran, Sahifa Sajjadieh, Nahj-al-Balaghah, Gharr- al-Hakam, Dar-al-Kalam, and some related nursing and medical palliative texts. The program was based on 4 domains including individuals' relationship with God, themselves, others, and with the environment. Audio-video materials, spiritual assignments, and lecture discussions were used to facilitate the learning either face to face or virtually. The first session was aimed to change patient's views to see the disease in a different way to help them improve their self-esteem. The second session was planned to correct and strengthen a real and continuous relationship with God. For this purpose, religious texts related to God's kindness, loveliness, theology, vitality, and happiness in life were used. The aim of the third session was for patients to communicate with themselves so that they can improve their resilience. In the fourth session, the goal was for patients to communicate with themselves in a way to discuss self-esteem and differentiate it from some unrealistic values and spiritual solutions in the field of self-esteem. The soul, especially self-knowledge and spiritual self-awareness, was also explained. In the fifth session, the goal was to correct and strengthen relationships with others (especially regarding anger, forgiveness, and tolerance). These issues were discussed in the group and the methods for appropriate spiritual coping were taught. Strategies that their peers used previously to control anger were presented and evaluated. In the sixth session, the goal was to strengthen a God-centered approach of patients towards nature. The focus of this session was for patients to see nature and its beauties and to note that such beauties were created by a stunning creator. Such an approach might lead patients reaching to a sense of real self-esteem. Concurrently with the intervention group, in the third and sixth sessions, the control group received voice and textual information about cancer, medical care, and nutrition virtually using the WhatsApp program. SEI and demographic characteristics questionnaires were completed before the first session and immediately after the sixth session by patients of both groups through self-report and online methods. Data were analyzed using the SPSS program version 19.0 (SPSS Inc., Chicago, IL, USA). The measures of descriptive statistics (mean and standard deviation) and inferential statistics (Chi-square, Fisher's exact test, independent *t* test, and paired *t* test) were used for the data presentation.

Ethical considerations

This research was approved by the ethics committee of Isfahan University of Medical Sciences (IR.MUI. RESEARCH.REC.1398.688). Before starting the research study, patients were informed about the aims of the study and assured that the collected information remains confidential. Written informed consent was given by participants and they informed that they can leave the study at any time if they so desired. The permission to conduct

the study was given by the authorities of the hospital and the MACSA.

Results

The mean (SD) of age in the intervention and control groups were 34.90 (4.74) and 36.23 (3.51), respectively. The mean (SD) of the duration of the disease per year in the intervention and control groups were 2.75 (0.60) and 2.20 (0.24), respectively. 96.90% and 100% of participants in the intervention and control groups were women, respectively. Approximately 87.50% and 97.40% of participants in the intervention and control groups were married, respectively. The majority of patients in both intervention (65.60%) and control groups (84.60%) had breast cancer. Surgery was the main treatment in both intervention and control groups (75.00% and 85.10%, respectively). The results of statistical tests showed no significant differences between important demographic and clinical characteristics (including the type of cancer, duration of disease, frequency of hospitalization, and type of treatment) before the intervention between the two groups ($p > 0.05$). The total self-esteem mean score and its domains were not significantly different between the two groups before the intervention ($p > 0.05$). After conducting the intervention, the total self-esteem mean score and its domains (except for the educational/occupational) were significantly higher in the intervention group compared with the control group ($p < 0.001$) [Table 1].

Discussion

To the best of our knowledge, this is the first study conducted to examine the effect of a spiritual care program on the self-esteem of patients with cancer in an Iranian context with a specific socio-cultural background. The majority of Iranian people are Muslim so the spiritual care program used in this study was designed according to Islamic laws. Based on a previous study conducted in Iran with patients having cancer,[14] the program had a holistic approach that included all individuals' relationships with God, themselves, others, and with the environment. Results showed that the spiritual care program was able to improve the general, family, and social domains. These domains included issues such as a sense of satisfaction, how to deal with problems, good behavioral performance, a sense of inner worth, a sense of confidence, self-acceptance, independence, and realism. Upgrading these domains has a great impact on improving interpersonal and social relationships. These results are consistent with existing studies in this field. For example, one study was conducted to investigate the sources of spiritual health in advanced cancer patients in Canada. The results showed that spiritual health had a positive relationship with religiosity, self-esteem and social relationships and a negative relationship with physical suffering. The results of this study also showed that spiritual care could increase patients' self-esteem and its domains in people with incurable diseases such as cancer.[15] Another study aimed to investigate the effect of a psycho-social spiritual intervention on promoting psycho-social status,

Quality of Life (QoL), self-esteem, and hope in women with breast cancer in Brazil. The results showed that spiritual care sessions improved patients' QoL, self-esteem, and hope, as well as achieving better compliance with the treatment, which ultimately increased patients' response to treatment.[16]

No significant change was found in the educational/occupational dimension of patients' self-esteem after the implementation of the spiritual care program. This dimension includes issues including creativity, a sense of empowerment, and academic achievement. These results are consistent with similar studies in this field. For example, the results of a study showed that training sessions had a greater impact on the general and family domains, and the educational/occupational domains of self-esteem required more effort to promote.[17] This may be because patients with cancer under treatment pay less attention to the occupational/educational domains of life compared with the general population while they are treating.[18,19] The results of another study also showed that a self-esteem promotion program could improve the general and family domains of self-esteem more than other aspects.[20] Findings of this study need to be considered along with its limitations. The statistical population of this study included patients referred to only one referral hospital in Isfahan province which covers a variety of cancer patients from different cities/provinces in Iran. Therefore, the results could be generalized to a wider population with caution. However, to increase the generalizability of the results, it is recommended that this study be performed in other parts of the country. Also, due to the prevalence of Covid-19 disease and the limitations imposed on the research, it is suggested that the study be conducted in a complete face- to- face method or using other virtual methods.

Conclusion

The results of the study showed that the spiritual care program based on Iranian and Islamic culture including all aspects of individuals' relationship with God, themselves, others, and with the environment was able to improve the general, family, and social domains of self-esteem but not the educational/occupational dimension of patients with cancer. Improving self-esteem in various domains, in turn, can affect interpersonal and social relationships as well as family relationships of patients. However, still other strategies need to be identified to improve the educational/occupational dimension of self-esteem of patients with cancer.

Conflicts of interest

Nothing to declare.

Table 1: Comparison of the total self-esteem mean score and its domains between experimental and control groups

Domains of self-esteem	Time	Intervention mean (SD)	Control mean (SD)	Independent *t*- test	
				t	*p*
Total score	Before the intervention	26.60 (3.92)	23.24 (3.40)	0.44	0.66
	After the intervention	30.90 (3.40)	23.30 (3.60)	9.11	<0.001
	Paired *t* test	12.43	0.07		
	p	<0.001	0.95		
General	Before the intervention	11.43 (2.90)	12.50 (2.30)	1.68	0.10
	After the intervention	15.72 (2.34)	12.50 (2.30)	5.83	<0.001
	Paired *t* test	6.71	1.29		
	p	<0.001	0.20		
Family	Before the intervention	3.61 (1.30)	3.42 (1.20)	0.78	0.44
	After the intervention	5.40 (1.12)	3.42 (1.20)	6.96	<0.001
	Paired *t* test	7.86	0.52		
	p	<0.001	0.61		
Social	Before the intervention	3.53 (1.24)	3.14 (1.30)	1.47	0.15
	After the intervention	5.30 (1.21)	3.14 (1.23)	7.37	<0.001
	Paired *t* test	10.41	0.54		
	p	<0.001	0.59		
Educational/Occupational	Before the intervention	4.34 (1.50)	4.10 (1.10)	0.85	0.40
	After the intervention	4.50 (1.10)	4.20 (1.00)	1.16	0.25
	Paired *t* test	0.50	1.64		
	p	0.62	0.11		

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