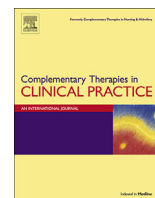


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## Effect of spiritual counseling on spiritual well-being in Iranian women with cancer: A randomized clinical trial



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### ABSTRACT

**Objectives:** This study examined the effect of spiritual counseling on the spiritual well-being of Iranian women with cancer.

**Design and setting:** a randomized clinical trial was conducted on 42 female cancer patients who were randomized to either an 8-week spiritual counseling intervention (n = 21) or a control group that received routine education/care (n = 21). Spiritual well-being (SWB) was assessed before and after the 8-week spiritual counseling program using Paloutzian and Ellison's (1983) Spiritual Well-Being Scale (SWBS).

**Results:** There were no significant differences on SWBS and its two subscales scores (RWB and EWB) between intervention and control groups at baseline (p > .05). After intervention, there was a significant mean difference in SWB (p = .001), RWB (p = .013) and EWB (p = .001) in two groups.

**Conclusions:** Spiritual counseling is associated with significant improvements in SWB in Iranian women with cancer. Interventions that acknowledge the spiritual needs of these patients should be incorporated into conventional treatments.

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### 1. Introduction

A cancer diagnosis and its treatment are challenging for a woman and may result in host of physical, psychosocial, behavioral, and spiritual concerns [1–3], which may threaten the woman's meaning of life, sometimes leading to a sense of disintegration [4].

The life-altering nature of cancer causes a significant increase in a woman's spiritual needs [5] and may result in a spiritual crisis [6].

Spirituality is a complex vague concept, and its definition depends on the individual's worldview [7]. Spirituality may include both (a) a vertical element referring to the relationship of the individual to a higher power or value system, and (b) a horizontal element referring to the role of transcendence in the person's way

of life and his/her connectedness to the moment, to self, to others, to nature and to the significant or sacred [8]. Spirituality and religion are primary resources for coping in women with cancer and these are often manifested in praying and increased dependence on God [9]. Many cancer patients seek comfort in spiritual beliefs, which in some instances have been associated with positive psychological outcomes [1,10]. Addressing the spiritual needs of cancer patients may be vital in speeding up recovery and achieving spiritual well-being (SWB) [11]. Cancer patients are faced with existential questions, and many find that SWB gives meaning and purpose to life, improves quality of life and may reduce psychological and even physical problems [2,12]. Acquiring SWB may be an appropriate way for some to cope with cancer and stresses associated with it [12]. For example, McClain et al. (2003) found that SWB had its strongest impact on despondency in cancer patients who thought that they were spending the last days of their life [13]. SWB may play an important role in controlling anxiety and depression, both their prevention and recovery [14,15]. SWB may

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have a positive impact on emotions that can keep the cancer patients in a tranquil state [16]. Higher SWB has been correlated in cancer patients with a number of health benefits such as reduction in chronic pain, increased coping skills, and higher quality of life [17]. Other studies have found that SWB is correlated with shorter hospitalizations, lower anxiety and hopelessness, and improvements in overall health [18,19].

Cancer patients need not only high quality medical treatment but also psycho-spiritual care in order to survive and thrive [2]. The spiritual dimension of care infuses all aspects of health care [20] and provides a framework for health care professionals to communicate with patients, listen to their fears and concerns, and involve them in shared decision-making, as part of holistic care [21]. Many cancer patients ask for help to find spiritual resources and derive sources of meaning in life [2]. Some investigators have shown that spiritual interventions provide a sense of spiritual connection that can improve mood in cancer patients [22].

Spiritual counseling (SC) is an intervention that relies on and utilizes the client's faith. In SC, the caregiver helps patients explore spiritual matters that may improve their general health and coping strategies. SC changes the client's attitude and addresses psycho-spiritual problems [23]. SC may include meditation, releasing emotions, spiritual self-disclosure, journaling, prayer, and/or Scripture study and inspirational readings [24].

SC has the potential to improve SWB in cancer patients [1,25]. It may allow patients to reevaluate their own life goals, priorities, and sources of meaning, and help to reduce emotional reactivity and reinforce appreciation for their life [1,26].

Spiritual care is a vital, but regularly neglected part of holistic care for patients with cancer and there is little information in the literature examining the effect of spirituality-based interventions in different contexts and cultures such as in Iran. The majority of Iranians are Muslim. Islamic teachings encourage people to tolerate negative life events and place special importance on SWB [20,27]. However, there is still little evidence regarding efficacy of SC in terms of increasing SWB of Iranian women with cancer. Therefore, we designed the present study to examine the effect of SC on the SWB of Iranian women with cancer.

Conducting such a study in Iran, where the majority of people are highly religious, may add to the existing knowledge base. In addition, the results of this study may help in the planning of non-pharmaceutical interventions designed to improve SWB in women who suffer from cancer in Iran.

## 2. Methods

### 2.1. Design

A randomized clinical trial was conducted to examine the effects of SC on the SWB of women with cancer.

### 2.2. Participants

Participants were recruited from Shahid Beheshti Hospital, a referral center for cancer patients in Hamedan, Iran. This center is affiliated to Hamedan University of Medical Sciences and provides specialized clinical and paraclinical services for cancer patients. Inclusion criteria were over age 18 years, being Shiite Muslim, at least 6 months since diagnosis of cancer, and not being in the end stages of the disease because of its severe physical and psychological complications [13]. Patients with other serious co-morbid medical conditions or major depressive disorder, and those who failed to participate in two or more counseling sessions were excluded. Participants were randomly assigned to either the intervention group (SC) or control group by using a random

numbers table. Patients in control group received standard treatment that included routine educations focused on nutrition, physical activity, and infection control. Those in the intervention group received standard treatment/education and SC.

### 2.3. Instruments

#### 2.3.1. Socio-demographic questionnaire

Socio-demographic data (age, marital status, educational level, and religious attendance) was collected by a questionnaire. Type of cancer and duration of disease was extracted from patients' medical records.

#### 2.3.2. Spiritual well-being scale (SWBS)

Paloutzian and Ellison's (1983) Spiritual Well-Being Scale (SWBS) was used to assess the primary outcome, SWB [28]. The SWBS is a 20-item scale developed as a general indicator of SWB and is recommended for use in clinical and research settings [29]. Each item is rated on a 6-point Likert-style from 1 (strongly disagree) to 6 (strongly agree). The SWBS is made up of two subscales, each with 10 items: Religious Well-Being (RWB) and Existential Well-Being (EWB). The RWB subscale assesses the vertical dimensions in terms of relationship with God, whereas the EWB subscale assesses the horizontal dimension having to do with the individual's life-meaning and purpose [30]. Total scores were computed for each subscale by adding the item scores. Possible subscale scores ranged from 10 to 60. Total scores for SWBS were computed by adding the two subscale scores and ranged from 20 to 120 (nine items were reverse-scored). High scores indicate a higher level of SWB. Finally, SWBS scores were classified into three levels: low (20–40), moderate (41–99) and high (100–120) [28]. In the original study, Paloutzian and Ellison (1982), the Cronbach's alphas for the RWB and EWB subscales were 0.91 and 0.91, respectively, and for the overall SWBS was 0.93 [28]. The SWBS has been used in other studies in Iran and the psychometric properties of the Iranian version of the questionnaire documented [31,32]. In the present sample, alphas for the total SWBS and for the RWB and EWB subscales were 0.88, 0.90, and 0.89, respectively.

All participants were asked to complete questionnaires before and after participation in the study.

### 2.4. Intervention

Intervention was carried out on an individual basis face-to-face to respect the privacy of participants [33]. The intervention consisted of eight sessions of SC conducted once a week (Table 1). Counseling sessions were held after hospital visiting hours to avoid conflict with patient care [33,34]. Each session incorporated Islamic teachings as part of the intervention and was modeled religious/spiritual interventions used in other studies [24,35]. The sessions were administered by trained counsellors with experience as a spiritual healer. Also, all sessions were conducted under supervision of a clinical psychologist who helped to develop the intervention. Each session lasted approximately 45–60 min and included a question and answer period, sharing, reflecting, providing feedback, relaxation exercises, and meditation. Participants were provided with homework that included recitation of Holy Qur'an and other religious books, along with relaxation exercises, which they reported on during the next session.

### 2.5. Data analysis

Statistical analysis was conducted using SPSS version 18 (PASW Statistics 18, SPSS Inc, Chicago, IL). Descriptive statistics are presented as means and standard deviations for quantitative variables

**Table 1**  
Contents of the SC sessions.

Sessions	Main topic	Content
First session	Introduction	The intervention was explained in this introductory session. Patients' expectations were identified; they were assured that their views and opinions would be respected by the researchers, and that all information provided would be confidential.
Second session	Relaxation and meditation	This session included instruction in relaxation and meditation exercises. Patients were encouraged to practice these techniques at home daily.
Third session	Releasing feelings and emotions	Patients were encouraged to express fears and concerns about their disease. Positive thoughts and attitudes toward fighting their cancer were affirmed.
Fourth session	Reinforcing positive thoughts	This session discussed the effects of faith and trust in God in reducing psychological problems based on Islamic religious teachings. Following these teachings, patients were encouraged to consider the positive aspects of life and the beauty of this world and cosmos [36]. They were encouraged to avoid suspicion and false judgments about their disease that might impede the natural flow of life.
Fifth session	Strengthening patience	This session focused on reinforcing patience and tolerance as a coping strategy from a religious or spiritual perspective [37].
Sixth session	Spiritual self-disclosure/writing diaries	Patients were asked to write notes about their daily events, which were then reviewed by counsellors and corrected for maladaptive interpretations and maladaptive assumptions that might lead to disappointment and unhappiness, all based on Islamic religious teachings [37].
Seventh session	Book therapy	During this session, patients recited the Holy Qur'an, particularly verses that focused on life meaning and hope [38]. Readings involving short stories about hope and tolerance from an Islamic perspective were given to the patients to study and then discussed during the next session.
Eighth session	Prayer therapy	In addition to discussing the readings, patients were encouraged to pray and talk to God [39] and to ask Him for help in dealing with difficulties related to their cancer.

and as frequencies and percentages for categorical variables. A Kolmogorov-Smirnov test (K-S test) was conducted to ensure that the data were normally distributed. An independent sample *t*-test and chi-square or Fisher's exact tests were used to determine statistical significant difference when comparing intervention and control patients' characteristics. Paired and independent sample *t*-tests were used to examine differences within and between the intervention and control groups. The alpha level was set a  $p < .05$  for statistical significance.

#### 2.6. Ethical considerations

This trial was assigned the Iranian Randomized Controlled Trial Registry Number IRCT2015112225187N1. The study was approved by Ethics Committee of Vice Chancellor for Research, Hamedan University of Medical Sciences (ethical code: 1394 IR. UMSHA.REC.240). All participants received study information and provided written informed consent.

### 3. Results

Forty-two patients (21 patients in the SC group and 21 patients in the control group) completed the eight-week intervention and completed baseline and follow-up assessments.

Eight women have been excluded: six women had not meet inclusion criteria and two women declined participation in the study (Fig. 1).

There were no significant differences on socio-demographic and clinical characteristics between intervention and control groups at baseline ( $p > .05$ ). The age range of the sample was between 26 and 74 years. Most participants were married (78.6%), 38.1% was illiterate, and nearly half were moderately engaged in religious practices (45.2%). The most commonly type of cancer was breast cancer (52.4%), and the mean duration of disease was ( $2.5 \pm 0.9$ ) years (Table 2). There were no significant differences on SWBS and its two subscales scores (RWB and EWB) between intervention and control groups at baseline ( $p > .05$ ); However, after intervention, there was a significant mean difference in SWB ( $p = .001$ ), RWB ( $p = .013$ ) and EWB ( $p = .001$ ) in two groups (Table 3).

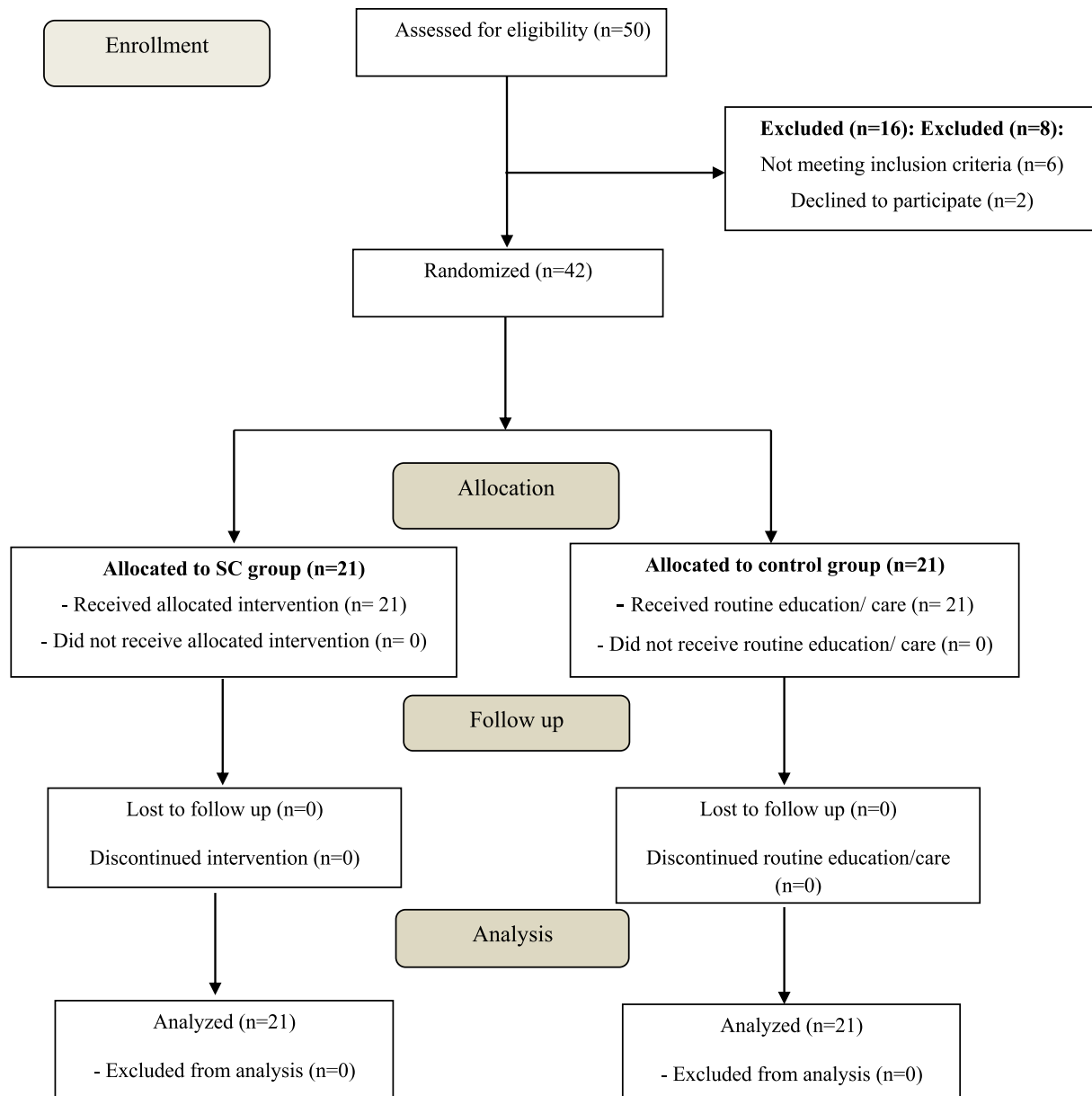
Before the intervention, 38.1% of those in the intervention group scored in the high group on SWB, while after the intervention 100% of participants scored in this category (Table 4).

### 4. Discussion

This study reported the effect of an eight-week SC intervention on the SWB of Iranian women with cancer. The results indicated that the majority of cancer patients had a moderate level of SWB before the intervention. This might be attributed to the context in which this study was conducted. Cultural and contextual factors, spiritual beliefs and customs can have a significant impact on SWB [20]. Iran is a religious country and majority of its population is Muslim [40]. Spiritual approaches are the main coping strategy in Iranian cancer patients, who consider spirituality a primary source of coping and hope [41,42]. Being Muslim is associated with a high level of faith and belief in God [1]. When affected by chronic or incurable diseases such as cancer, Muslims often report that their religious beliefs and practices are a source of comfort in alleviating physical and spiritual distress [27].

After eight weeks of SC, the mean scores of SWB, both religious and existential, were significantly higher in the intervention group than in the control group. Thus, SC appears to be an effective strategy for increasing SWB and both its religious and existential components among cancer patients in Iran. Other researchers have found that utilizing patients' spiritual resources can benefit cancer patients [2]. Breitbart (2002) found that spiritually-based interventions in cancer survivors strengthened both meaning and faith, two key elements of SWB [43]. Cecilia et al. (2001) reported that addressing the spiritual needs of cancer patients increased their physical, psychosocial and SWB [44]. Aukst-Maretic (2005) reported similar findings when spiritual interventions were offered to cancer patients [18]. Cordova et al. (2001) also found that providing a space and a facilitator to assist cancer patients helped them to reevaluate their life goals, priorities, and sources of meaning, consequently improving their SWB [45].

Findings of the present study indicated that SC can have a significant effect on the EWB of cancer patients in Iran. The intervention caused a greater improvement of EWB than of RWB. Meaninglessness, hopelessness, being a burden on others, and many other self-defeating thoughts and feelings lead to "existential suffering" in cancer patients [2]. SC encourages patients to express their fears and concerns, release their feelings and emotions, and strengthen their patience, tolerance and hope, all within a religious framework. These strategies had a significant impact on EWB of participants. Likewise, Cunningham (2005) found that an eight-



**Fig. 1.** Flow chart of participant enrollment, allocation and data analysis.

week group psycho-spiritual therapy intervention enabled cancer patients to be better accept their condition and experience an enhanced sense of meaning in their lives [46]. Jafari et al. (2013) reported that participation in a spiritual therapy program was associated with improvements in meaning and peace components of SWB [1]. Hsiao et al. (2012) found that spiritual therapy played an important role in promoting an active search for life meaning and opportunities for personal growth [47].

#### 4.1. Study limitations

This study has several limitations that must be acknowledged. First is the small sample size, which reduced the statistical power of the study. Thus, the present findings must be confirmed in larger studies. Second is that there was no follow-up after the 8-week intervention to assess whether the beneficial effects of SC persisted. Third is that the results of this study should not be generalized

beyond Shiite Muslim female cancer patients in Iran. Similar studies are needed among male cancer patients in Iran and other Middle Eastern countries.

#### 4.2. Clinical implications

Several implications for clinical practice can be drawn from the present study. Targeted interventions that identify and address the spiritual needs should be considered in Iranian women with cancer, in addition to conventional treatments for cancer.

Healthcare professionals, particularly nurses, should be knowledgeable about Islam and be able to take spiritual/religious factors into account in their cancer care plans. Taking a spiritual/religious history, supporting religious beliefs, facilitating access to spiritual/religious resources, and involving chaplains in the healthcare team are ways that healthcare providers can do this [48,49].

**Table 2**  
Characteristics of the intervention and control groups.

Variable	Intervention (n=21)		Control (n=21)		Total (n=42)		Statistical test	
	M (SD)		M (SD)		M (SD)		t-test	p-value
Age (year)	47.1 (12.4)		49.1 (12.2)		48.1 (12.3)		t=-0.52	.60
Duration of disease (year)	2.8 (0.8)		2.3 (1.1)		2.5 (0.9)		t= 0.47	.63
	category	n (%)	n (%)	n (%)	n (%)		X <sup>2</sup>	p-value
Marital status	Single	5 (23.8)	4 (19)	9 (21.4)			2.15 <sup>a</sup>	.231
	Married	16 (76.2)	17 (80.9)	33 (78.5)				
Educational level	Illiterate	6 (28.6)	10 (47.6)	16 (38)			4.286	.117
	Primary education	6 (28.6)	8 (38.1)	14 (33.3)				
	Diploma	9 (42.8)	3 (14.3)	12 (28.5)				
Participation in religious ceremonies	Low	6 (28.6)	3 (14.3)	9 (21.4)			1.333	.615
	Moderate	9 (42.8)	10 (47.6)	19 (45.2)				
	High	6 (28.6)	8 (38.1)	14 (33.3)				
Type of cancer	Breast cancer	12 (57.1)	10 (47.6)	22 (52.3)			1.65	.531
	Gastrointestinal	5 (23.8)	5 (23.8)	10 (23.8)				
	Others	4 (19)	6 (28.6)	10 (23.8)				

<sup>a</sup> Fisher exact test.**Table 3**  
Comparing the mean \*differences of spiritual well-being and its subscales at the beginning and at the end of the study (n = 42).

Measure	Intervention group (n = 21) (Mean ± SD)	Control group (n = 21) (Mean ± SD)	p-value
Religious well-being	3.6 ± 0.4	0.4 ± 0.01	.013
Existential well-being	10.7 ± 1.2	0.8 ± 0.05	.001
Spiritual well-being	14.2 ± 1.9	1.1 ± 0.29	.001

Results of t-tests analyses, \*the mean difference is defined as the mean scores at the end minus the mean scores at the beginning of the study.

**Table 4**  
Baseline and follow-up Spiritual well-being categories in the intervention and control groups (n = 42).

Spiritual well-being (20–120)	Intervention group (n=21)				Control group (n=21)			
	Baseline		After trial		Baseline		After trial	
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	
Low (20–40)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
Moderate (41–99)	13 (61.9)	0 (0)	13 (61.9)	11 (52.4)				
High (100–120)	8 (38.1)	21 (100)	8 (38.1)	10 (47.6)				
Total	21 (100)	21 (100)	21 (100)	21 (100)				

#### 4.3. Research implications

Intervention studies to test the efficacy of SC should be conducted in Iranian patients experiencing other disabling conditions. While this is a relatively small-scale study and conducted with one particular group of women diagnosed with cancer, it would be interesting to explore the impact of SC on other groups of women as well as in other religious groups in Iran and the Middle East. Larger samples involving a variety of urban hospitals and representing different areas of Iran should be utilized when attempting to replicate these findings.

#### 5. Conclusion

We found that SC improved SWB, both its religious and existential aspects, in Iranian women with cancer. If these findings can be replicated, then graduate and postgraduate training programs in Iran (and elsewhere in Muslim majority countries) should emphasize the importance of SWB for women with cancer and

provide training in SC interventions that enhance SWB. This represents a potentially serious gap in Iranian nursing education programs that needs to be addressed in the future.

#### Conflicts of interest

None of the authors have any conflicts of interest.

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