Impact of a Spiritual Care Program on Spiritual Wellbeing of Oncology Nurses: A Randomized Clinical Trial

Abstract

Background: Spiritual wellbeing (SWB) of nurses working in oncology wards is directly related to quality of care they provide. An increase in their SWB might lead to decrease in their spiritual distress and increase in their coping strategies. The aim of this study was to investigate the impact of a spiritual care program on SWB of nurses. Materials and Methods: This study is a clinical trial with before and after intervention groups, which was carried out on 65 nurses in Omid Hospital in Isfahan in 2017. Nurses were randomly assigned into control (n = 34) and intervention groups (n = 31). The data were collected through demographic and SWB scales. Spiritual care program consisting of eight sessions of four relationship-based domains, including relationships with God, self, others, and the environment, were carried out in the intervention group. Two care training sessions in oncology departments were conducted for the control group. Results: The results indicated that the differences in SWB mean scores between the intervention and control group after treatment were statistically significant (t = 2.58, p = 0.012). Also, SWB mean scores in the intervention group before and after treatment showed a statistically significant difference (t = 2.86, p = 0.008). Conclusions: The results showed that the spiritual care program might have a positive impact on the SWB of nurses working in oncology wards. Therefore, it is indispensable to promote and prioritize the SWB of nurses so that patients and their families will receive better health services.

Keywords: Iran, nurses, oncology, spiritual care, spiritual wellbeing

Introduction

Evidence suggests that spirituality is an important aspect of cancer patients’ quality of life.[1−3] A number of studies have been done to assess cancer patients’ spirituality or quality of life.[2,4,5] However, the spirituality of nurses working in oncology wards has often been overlooked.[6] Experts believe that health professionals, especially nurses, are constantly exposed to critical and stressful situations.[6] The complexity of nursing practice can affect their spiritual health and the quality of their performance.[7,8] An increase in spiritual wellbeing (SWB) in oncology nurses might lead to decrease in their spiritual stress and increase in their coping.[9]

Spirituality of nurses can also affect nursing care of cancer patients. In a study conducted in three European countries, it was found that oncology nurses who had lower levels of spirituality were rarely enabled to provide spiritual care to patients with cancer.[10] Chiang et al. believed that if the SWB of nurses is higher, they can take care of their patients with more love and compassion as well as pay more attention to the SWB of their patients.[11] In a qualitative research carried out by Khorrami-Markani et al., results indicated that the spirituality of oncology nurses should be taken into the consideration to solve and identify the spiritual needs of cancer patients.[9]

Despite the importance of improving the spirituality of nurses working in oncology wards using spiritual programs, no interventional study found in an Iranian context aims to promote the spiritual health of nurses. We could only identify one cross-sectional study to assess nurses’ spirituality. In this study, results showed that the psychological–spiritual dimension score of quality of life of oncology nurses had a considerable distance from the ideal situation.[1] In another study conducted by Ozbasaran et al. in Turkey in 2011, it was found that nurses’ spirituality had a


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considerable distance from the ideal situation.\cite{12} Because of differences in spirituality situation in other countries, compared to Muslim countries, research results cannot be generalized to Iran.\cite{13,14} Therefore, this study was aimed to investigate the impact of a spiritual care program on SWB of nurses working in oncology wards.

**Materials and Methods**

This study is a clinical trial (No. IRCT2017022532770N1) with control and intervention groups, which was carried out for a period of 2 months from February 5 to March 25, 2017 in Omid Hospital in Isfahan, Iran. The study population included all working nurses with the following inclusion criteria: A minimum of 1 year working experience in oncology wards, being Muslim and speaking Persian, having at least an associate degree in nursing and signing a consent form to participate in the research. Exclusion criteria were absence for more than one session in caring program, lack of interest to continue sessions, and coming to intervention sessions late.

The sample size was calculated as 70 subjects by power analysis with a power of 80%, $d = 0.70$ s, and $z = 1.96$. Nurses were selected by convenient sampling and randomly assigned into intervention ($n = 35$) and control ($n = 35$) groups (using the web-based application on https://www.random.org). Four participants from the intervention group and one participant from the control group were excluded from the study due to lack of interest. At the end of the intervention, the intervention and control groups consisted of 31 and 34 participants, respectively [Figure 1].

Data were collected through a two-part questionnaire. The first part was related to demographic information of nurses (age, sex, education level, marital status, work experience, and wards). The second part was SWB scale questionnaire developed by Paloutzian and Ellison in 1982. The scale contains two subscales: (a) Religious wellbeing (RWB) and (b) Existential wellbeing (EWB). RWB refers to the feeling of having a relationship with a superior power, whereas the EWB is interpreted as trying to understand the meaning and purpose of life. Each subscale includes 10 items, which result in a score between 10 and 60. The total spiritual health score is the sum of these two subscales that have a range between 20 and 120. The questionnaire contains 20 items with six-point Likert scales (from strongly agree to strongly disagree). The scores of items 1, 2, 5, 6, 9, 12, 13, 16, and 18 were reversed. Higher scores represented higher levels of spiritual health.\cite{15} The face and content validities of this scale were approved in a study to identify the relationship between nurses’ spiritual health and their caring behaviors by Atashzadeh-Shoorideh et al. The reliability of the questionnaire was also 0.87% using Cronbach’s alpha.\cite{16}

The content of spiritual care program was extracted from the books of spiritual care, palliative care, and the results of previous research.\cite{17,19} The mentioned spiritual care program consisted of needs and domains. Four domains of the program included human relationship with God, self, others, and connection with the environment.\cite{18} Its spiritual needs included goal-meaning and faith-belief. Sessions took place with the aim to meet the spiritual needs with a focus on four domains of human communications and by applying some spiritual strategies\cite{17} [Table 1].

Teaching methods that were used in this study included formal slides and lecture, along with a short description and the image that depicted spiritual themes (the relationship with God, self, others, and the environment), such as meaning, purpose, faith, and belief in life. Group discussion was also incorporated at the end of the session. Other strategies consisted of spiritual readings (derived from the Quran) [Table 2],\cite{20} focus groups debates, spirituality labels (for reminding and recalling the content at intervals between sessions), films and video clips (containing the main purpose of creation and the life, forgiveness to others, thinking of beings and the environment), short stories (documenting the life of a teenager who lives with cancer and documenting the life of a nurse student suffering from leukemia and spiritual compatibility), role modeling and simulation (to show the effect of spiritual care), and practice and activities in class.\cite{21}

The SWB questionnaire was completed on an individual basis in the first session by all participants in the intervention and control groups. The intervention group received eight sessions of intervention for 8 weeks. The spiritual intervention sessions were held for eight consecutive weeks, once a week, in groups (groups of four to five subjects) in morning or evening shifts and in accordance with the care plan. Each session lasted for 45–60 min depending on the content. The sessions were conducted by the researcher with the supervision of an expert in the spirituality field in the hospital. Before the
study, the researcher attended 16 sessions in a 2-month training program (60 h) on spiritual and palliative care in Ala Palliative Centre in Isfahan, Iran. Currently, Ala’s Palliative Care Centre is the largest and most professional healthcare partner in the field of palliative care in Iran, and is contracted to provide services through a memorandum of understanding with the Ministry of Health and Medical Education.

Based on the previous studies, each session consisted of five parts, including greeting and recalling the content of previous session (5–10 min), introducing a spiritual strategy and discussing its effects on everyday life, mental health, and life satisfaction (about 20 min), a short break (5–10 min), assigning a class practice to allow each subject to immerse in the learned spiritual strategy, find its instances in their past experiences, and apply it to his/her present life (5–10 min), summarizing the session content and giving the participants a training manual on the introduced spiritual strategy (5–10 min). In the second and sixth weeks of the study, the control group received two sessions of training program on principles of cancer care. Immediately after the completion of the intervention, SWB questionnaire was completed by all of the participants on an individual base and in the workplace.

Statistical analysis was performed through SPSS software version 19 (SPSS Inc., Chicago, IL, USA) by descriptive and inferential tests (paired t-test, independent t-test, Chi-square test, Fisher’s exact test, and Mann–Whitney test). In cases that data had no normal distribution, nonparametric statistical tests were used to analyze the data. *p value* <0.05 was considered significant.
Ethical considerations

The participants were informed of the goals of the study and their rights to withdraw the study anytime they desired and signed a written informed consent. The anonymity of the nurses was ensured, as the questionnaires did not require any identifying details. The research project was approved by the Ethics Committee of Isfahan University of Medical Sciences (Ethics code no.: IR.MUI.REC.1390.309048), Isfahan, Iran.

Results

The findings of this study showed that 90.30% in the intervention groups and 82.40% in the control group were female. In addition, 80.60% of the intervention group and 73.50% of the control group had a bachelor’s degree in nursing. Also, 45.50% of the intervention group and 73.50% of the control group were married. The majority of nurses in the intervention group were from surgical (25.80%), pediatric (19.40%), and operating room (19.40%) wards. In the control group, the majority of nurses were from the surgery (17.60%) and pediatric (17.60%) wards. The mean (SD) of age in intervention and control groups were 8.61 (7.19) and 9.97 (8.90), respectively. The mean (SD) of overall work experience in the intervention and control groups were 8.61 (7.19) and 9.97 (8.90), respectively. Mean (SD) of overall work experience in the oncology unit in the intervention and control groups were 4.51 (3.17) and 6.91 (8.17), respectively. The results of Fisher’s exact test, independent t-test, and Mann–Whitney showed that there were no significant differences between two groups before the intervention regarding their demographic characteristics (p > 0.05).

The results of independent t-test in the intervention and control group before the study showed that they had no significant difference in terms of mean scores of existence dimension of SWB (t = 0.60; p = 0.55), religious dimension of SWB (t = 0.50; p = 0.668), and total score of SWB (t = 0.54; p = 0.957). The results indicated that the differences in SWB mean scores between the intervention and control group after intervention were statistically significant [Table 3]. The findings related to the total mean score (SD) of SWB in intervention group before and after the intervention were 80.64 (16.26) and 90.70 (16.35), respectively (t = 2.86; p = 0.008). Comparison of the mean scores of the existence and religious dimensions in the intervention group before and after the intervention has been presented in Table 4.

Discussion

This was the first interventional study in an Iranian context aiming to improve SWB of nurses working in oncology wards. The RWB mean score of the oncology nurses after the intervention was significantly higher than the relevant scores before the intervention. This confirms the promotion of oncology nurses in the RWB. The EWB mean score of the oncology nurses after the intervention also significantly increased, compared to the pre-intervention confirming the promotion of oncology nurses in EWB.

The most important effects of this spiritual care program were due to the impact of using clips and films on health and wellbeing, loving one, hopes, pleasures, and happiness. The use of stories had a profound effect on understanding of the meaning and purpose of life, loving, hoping for goals, purity of purpose, and patience. On the contrary, the use of spiritual labels that could be installed on the doorway, behind the cell phone or on the desk had a significant impact on reminding and better understanding of the spiritual care program among the subjects in the intervention group. They were effective in the context of the growth of individuals in the field of dignity, inner calmness, and gratitude. Classroom discussions,

### Table 3: Spiritual wellbeing and its dimensions between the intervention and control groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Before intervention</th>
<th>Statistical test</th>
<th>After intervention</th>
<th>Statistical test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intervention Mean (SD)</td>
<td>Control Mean (SD)</td>
<td>t df p</td>
<td>Intervention Mean (SD)</td>
</tr>
<tr>
<td>RWB</td>
<td>38.02 (9.74)</td>
<td>37.03 (8.79)</td>
<td>0.50 63 0.668</td>
<td>37.41 (9.39)</td>
</tr>
<tr>
<td>EWB</td>
<td>42.26 (9.27)</td>
<td>43.61 (8.74)</td>
<td>0.60 63 0.550</td>
<td>42.08 (8.95)</td>
</tr>
<tr>
<td>SWB</td>
<td>80.41 (18.42)</td>
<td>80.64 (16.26)</td>
<td>0.54 63 0.957</td>
<td>79.90 (17.61)</td>
</tr>
</tbody>
</table>

RWB: Religious wellbeing; EWB: Existential wellbeing; SWB: Spiritual wellbeing (total score); df: Degrees of freedom; SD: Standard deviation

### Table 4: SWB score and its dimensions before and after intervention

<table>
<thead>
<tr>
<th>Group</th>
<th>Control</th>
<th>Intervention</th>
<th>Statistical test</th>
<th>Statistical test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Mean (SD)</td>
<td>After Mean (SD)</td>
<td>Before Mean (SD)</td>
<td>After Mean (SD)</td>
</tr>
<tr>
<td>RWB</td>
<td>38.02 (9.74)</td>
<td>37.55 (9.47)</td>
<td>1.11 63 0.271</td>
<td>37.03 (8.79)</td>
</tr>
<tr>
<td>EWB</td>
<td>42.26 (9.27)</td>
<td>42.08 (8.95)</td>
<td>0.46 63 0.646</td>
<td>43.61 (8.74)</td>
</tr>
<tr>
<td>SWB</td>
<td>80.41 (18.42)</td>
<td>79.79 (17.61)</td>
<td>0.99 63 0.327</td>
<td>80.64 (16.26)</td>
</tr>
</tbody>
</table>

RWB: Religious wellbeing; EWB: Existential wellbeing; SWB: Spiritual wellbeing (total score); df: Degrees of freedom; SD: Standard deviation
Acknowledgments

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Conflicts of interest

Nothing to declare.

References

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