J Relig Health (2019) 58:881–890
DOI 10.1007/s10943-017-0453-6

ORIGINAL PAPER

Evaluation of Distress and Religious Coping Among Cancer Patients in Turkey

Elanur Yılmaz Karabulutlu[1] · **Süheyla Yaralı**[1] · **Seda Karaman**[1]

Published online: 21 July 2017

Abstract The purpose of this study was to determine distress levels and religious coping styles of cancer patients and the relationship between religious coping styles and distress. This study was conducted as descriptive design. It was determined that 60.7% of the patients experienced distress related to the disease. The field of problem from which the patients mostly experienced distress was physical problems. It was observed that positive coping scores of the patients were higher. There was a negative correlation between their mean scores for positive religious styles and distress total scores.

Keywords Cancer patients · Distress · Religion coping

Introduction

Cancer is a challenging disease with its psychological, material, moral, and social aspects as well as the physical impairments it causes. Diagnosis and treatment of cancer result in considerable distress in most of the patients. Recent studies suggest that 40–50% of adults with cancer seen on outpatient basis experience clinically significant levels of distress (Jacobsen and Ransom 2007; Bultz and Carlson 2010; Abrahamson 2010). Although distress provides significant clues about the course of disease, it is generally difficult to define distress due the fact that its symptoms are similar to the side effects of the disease and the treatment and some patients cannot express this situation orally (Carlson and Bultz 2004; Bultz and Carlson 2005; Abrahamson 2010). Symptoms for distress are highly important clues to identify distress. In patients with cancer, fear and anxiety, anger, insomnia, changes in appetite, decreasing level of concentration, difficulty in decision-making, being a sorrowful mood which prevents accurate thinking, pain, fatigue, nausea,

✉ Elanur Yılmaz Karabulutlu
elanurkarabulutlu@hotmail.com

[1] Faculty of Health Sciences, Atatürk University, 25000 Erzurum, Turkey

and inability in coping with all such ailments are listed as important symptoms of distress. In addition, side effects of the treatment are another source for distress (Jacobsen and Ransom 2007).

Cancer is a difficult process which the individuals cannot control but have to go through. Individuals get over this difficult period by means of their personal experiences, spiritual and cultural values, and by attributing new meanings to themselves and to the world. Therefore, religious beliefs are quite important for people in coping with the problems that push the limits in human life (Hiçdurmaz and Öz 2013). Pargament (2002) points out that spiritual or religious practices turn into coping styles in case of stress or crisis and this situation has a strong effect on human health. As religious and spiritual practices affect individual's point of view and provide source for coping, they have a positive effect on people at the time of stress or crisis (Pargament 2002). In case of disease, the individual takes refuge in a divine power in order to cope with such difficult situation and receives support from his/her beliefs by praying and worshipping in a manner suited for his/her belief. In order to solve especially problems, which are beyond human power, tendency to take refuge in holy values and use religious coping activities increases (Ayten 2015). Tendency of seeking refuge in the God and showing patience and firmness against difficulties with the support of God contributes individuals to feel strong, cope with difficulties, and grow. Such kind of a coping process increases the determination of people, who are physically and mentally ill, in particular to cope with difficulties, and brings power to the individuals to accept the disease and struggle with it (Ayten 2015; Kula 2006). Religious coping has been analysed in two aspects as positive and negative religious coping styles. Positive religious coping includes a close relationship with the holy one, believing in spiritual meaning of pains and cooperating with God in solution of problems. Negative religious coping is explained by certain features such as spiritual disconnection, suspicion in power and love of God, or excluding God from solution (Pargament et al. 2000). Positive religious coping is constructive and beneficial for the individuals in overcoming mental health and problems. On the other hand, negative religious coping is related to increasing physical sensitivity, feeling sinful, punishment, being abandoned, psychological problems, and attempts to suicide (Exline et al. 1999; Pargament et al. 2001; Trevino et al. 2014).

Studies show that in the diseases such as cancer, patients tend to religion more and use highly positive religious coping styles (Celasin et al. 2011; Holt et al. 2011; Delgado-Guay et al. 2011; Vallurupalli et al. 2012; Khalili et al. 2013; Asuzu and Elumelu 2013). Praying, attending into a religious meeting, and performing certain religious rituals provide important benefits for the patient to adapt himself/herself to the cancer (Woll et al. 2008). As a matter of fact, other studies have reported that religious coping mechanisms increase adaptation to disease in cancer patients, provide aim and meaning for the patients, increase hope and emotional relief, and enhance mental health and power of living (Nairn and Merluzzi 2003; Holt et al. 2011; Thuné-Boyle et al. 2013). It has been detected that there is a correlation between psycho-social distress and religious coping styles used by cancer patients. It is stated that there is a negative correlation between religious behaviours and symptoms of depression, negative religious coping increases the symptoms and decreases life satisfaction, and positive coping decreases the symptoms (Sherman et al. 2005; Holt et al. 2011; Finney et al. 2014). Therefore, it is required to determine the distress level and coping styles of cancer patients and to support positive coping styles. Despite being under responsibility of the whole team, diagnosis and assessment of distress in cancer patients should be followed and monitored, especially by the nurse who spends long time with the

patient and provides professional care to them (Gil et al. 2005; Shim et al. 2008; Abrahamson 2010; Estes and Karten 2014).

Aim of the study

The purpose of this study was to determine distress levels and religious coping styles of cancer patients and the relationship between religious coping styles and distress.

Research questions

- How are the distress status and religious coping styles of cancer patients?
- Is there a relationship between religious coping styles and distress of cancer patients?

Methods

Study Design and Participants

This study was conducted as a descriptive design. The study was conducted in Atatürk University Hospital, Medical Oncology Clinic and Chemotherapy Unit. Data of the study were collected in 2013. The study population consisted of 287 patients with cancer, who were hospitalized in oncology clinic and admitted to the chemotherapy unit for treatment. And, 201 (70%) patients, who met the study inclusion criteria and agreed to participate, were included in the sample of the study. Research inclusion criteria: aged 18 years and above, Muslim religion, can read and understand Turkish and no visual and mental disability that may prevent to participate in the survey.

Measurement

Demographic and Medical Information

This form involved questions determining demographic characteristics of the patients, such as gender, age, marital status, educational status, profession, and features such as diagnosis of disease, duration of disease, method of treatment, and occurrence of another disease.

Distress Thermometer

The scale was developed by Roth et al. (1998) in order to measure psycho-social distress in cancer patients (Roth et al. 1998). The level of distress was rated between 0 and 10. This is a visual analogue scale which can be applied by the individuals on their own. On the scale, there is a thermometer including numbers from 0 to 10. The practitioner states the distress that he/she experiences by means of such numbers on this thermometer. 0 point shows that the individual does not experience distress at all, and 10 points show that the individual experiences distress at maximum level. In 2003, NCCN added a problem list to the distress thermometer. The problem list includes problems which are often seen in cancer patients. The problems in the list have been grouped in five categories. The first group includes *practical problems*. These are listed as sheltering, social security, work/school, transportation, and child care. *In the second group, there are family-related problems.* Spouses and children constitute this group. *The third group includes emotional problems* such as

sadness, sorrow, depression, and irritability. *The fourth group includes problems related to spiritual/religious*: losing faith and meaning problems related to God. *The fifth group includes physical problems*. Conditions within physical problems are pain, nausea, fatigue, sleep, wandering, bathing/clothing, dyspnoea, mouth sores, eating, indigestion, constipation/diarrhoea, urinary disorders, fever, skin drying/itching, nasal obstruction, tingling in hand/foot, distention, and sexual problems. Validity/reliability study of the scale in Turkey was conducted by Özalp et al. (2007). In this study, cut-off point of the scale in Turkey was found as 4. The patients getting point above the cut-off point should immediately be dealt by the professionals. In the study, it was found that sensitivity of the scale was 0.73 and its specificity was 0.49 (Özalp et al. 2007). In this study, the general Cronbach's alpha coefficient of the distress thermometer was 0.75.

Religious Coping Scale (RCOPE)

RCOPE developed by Pargament et al. (2000) can be easily used in social sciences and health researches as it is brief. The scale was recommended especially to those who want to add a theory-based and effective religious dimension to stress, coping, and health models. The 14-item scale is a 4-point Likert-type scale. The scale has two sub-scales such as positive religious coping (PRC) and negative religious coping (NRC). PRC includes a close relation to the holy one, believing that the pains have a spiritual meaning and cooperating with the God in solving problems. NRC, on the other hand, is explained by features such as spiritual disconnection, suspicion in power and love of God, or excluding God from solution (Pargament et al. 2000). While low scores show that religious coping style is used less, high scores indicate that religious coping style is used much. Turkish validity and reliability study of the scale was conducted by Ekşi (2001), and Cronbach's alpha coefficient was calculated as 0.69 for overall scale, 0.64 for PRC, and 0.63 for NRC (Ekşi 2001). In this study, the general Cronbach's alpha coefficient was 0.62 for PRC and 0.64 for NRC.

Procedure

The data collection process was carried out by two researchers. Patients were interviewed before data collection began. Patients who were willing to participate in the study were interviewed in oncology clinic and outpatient chemotherapy clinic in an empty room. Data were collected by face-to-face interviews with the patients. The interviews lasted for about 10 min. In order to conduct the study, necessary permissions were obtained from Ethics Committee of Atatürk University, Faculty of Health Sciences (no 2014/01/01), and Atatürk University Hospital. Patients were informed about the purpose of the study, and their verbal consents were taken. Voluntariness and confidentiality principles were obeyed in the study.

Statistical Analysis

Statistical analysis of data was conducted using SPSS 16.0. Collected data were coded and analysed using the descriptive statistic and statistical tests including *t* test, Chi-square test and Pearson's correlation test.

Results

Demographic Characteristics

When socio-demographic characteristics of the patients included in the study were examined, it was observed that 63.2% were female; 29.4% were aged between 56 and 65 years; 84% were married; 58.6% were primary-school graduates; and 55.7% were housewives. Sixty-nine per cent of the patients were in the hospital for chemotherapy. It was determined that 22.9% of the patients were diagnosed with gastrointestinal cancer, 21.4% with breast cancer, and 20.4% with lung cancer; disease period of 47.8% was between 3 and 12 months, and 66.2% had no other disease.

Distress Status

It was determined that 60.7% of the patients experienced distress related to the disease and distress mean score was 4.78 ± 3.34 (Table 1).

Distress Fields

The field of problem from which the patients mostly experienced distress was physical problems, and the most common source of distress was pain (44.3%) and fatigue (32.3%). It was found that the patients mostly suffered from symptoms related to anxiety (i.e. worry, nervousness) in the field of emotional problems (30.3%), they have children-related problems in field of family-related problems (24.4%), and they experienced the problem about transportation (14.9%) in the field of practical problems (Table 2).

Religious Coping Styles

It was observed that positive coping scores of the patients were higher (22.38 ± 4.11) (Table 1).

Relationship Between Distress and Religious Coping Styles

When Table 3 was examined, it was determined that the patients who did not experience distress had higher mean scores for positive religious coping and there was a negative correlation between their mean scores for positive religious coping and distress total scores ($p < 0.001$).

Table 1 Distribution of distress status of patients and score religious coping styles of patients

Scales	*n*	%	X ± SD
Distress thermometer			
Living distress (>4)	122	60.7	7.07 ± 2.01
Not living distress (<4)	79	39.3	1.12 ± 0.37
Total	201	100.0	4.73 ± 3.30
Religious coping scale			
Positive religious coping	–	–	22.38 ± 4.11
Negative religious coping	–	–	7.83 ± 1.41

Table 2 Distribution of patients' distress fields

Distress fields[a]	*n* (%)
Practical problems	62
Insurance	2 (1.0)
Work/school	14 (7.0)
Transportation	30 (14.9)
Child care	16 (8.0)
Family problems	81
Dealing with partner	32 (15.9)
Dealing with children	49 (24.4)
Emotional problems	110
Worry	61 (30.3)
Sadness	18 (9.0)
Depression	2 (1.0)
Nervousness	29 (14.4)
Spiritual/religious problems	4
Loss of faith and meaning	4 (2.0)
Physical problems	336
Pain	89 (44.3)
Nausea	5 (2.5)
Fatigue	65 (32.3)
Sleep	61 (30.3)
Stroll	14 (7.0)
Bathing/dressing	8 (4.0)
Dyspnoea	16 (8.0)
Eating	30 (14.6)
Indigestion	14 (7.0)
Constipation	19 (9.5)
Changes in urination	4 (2.0)
Fever	5 (2.5)
Tingling in hands/feet	2 (1.0)
Swelling	4 (2.0)

[a] As more than one field and situation can be marked as a distress source, it is more than $n = 201$

Table 3 Distribution of cancer patients' distress status according to religious coping styles and correlation between distress and religious coping styles

Religious coping styles	Presence of distress		Distress total score
	Living distress	Not living distress	
Positive religious coping			$r = -0.259$ $p = 0.000$
	21.40 ± 3.89 $t = -4.349$	23.88 ± 4.01 $p = 0.001$	
Negative religious coping			$r = 0.046$ $p = 0.515$
	7.85 ± 1.03 $t = 0.206$	7.81 ± 1.86 $p = 0.837$	

Discussion

The current study focused on the distress levels and religious coping styles of cancer patients and the relationship between religious coping styles and distress. A large majority of patients were found to be distressed (distress rate 60.7%; distress mean score >4). Many studies have revealed that the cancer patients experience high level of distress (Ryan et al. 2012; Wang et al. 2013; Mansourabadi et al. 2014; Pranjic et al. 2016). Unsolved distresses affect decisions related to the treatment, adherence to treatment, and quality of life of patients. Therefore, the objective for health professionals should be development of routine clinical practices which will enhance patient results by means of evidence-based approaches, rather than providing only emotional support for the patients (Abrahamson 2010). The study findings showed that cancer patients have higher score in positive religious coping. In most of the studies, it has been stated that cancer patients mostly use positive religious coping styles (Sherman et al. 2005; Delgado-Guay et al. 2011; Mesquita et al. 2013; Ursaru et al. 2014). Cancer patients have high tendency to orient to the religion and feel that they approach to God after the disease and they tend to pray (Asuzu and Elumelu 2013). Previous studies show that Muslim cancer patients use positive coping approaches such as reading Quran, prayer, supplication, and feeling that the God is with himself/herself (Alaloul et al. 2016; Shaheen Al Ahwal et al. 2016). The worldview of Muslim patients towards health and illness incorporates the notion of receiving illness and death with patience, meditation, and prayers. Muslim patients understand that illness, suffering, and dying are part of life and a test from God. In illness, the awareness of God increases and Muslims become closer to God by realizing their own weakness. During this time, Muslims ask forgiveness from God because they believe that God is ever-forgiving (Rezaei et al. 2008).

In the study, it was determined that the problems from which patients mostly experienced distress belonged to the physical problems and the most common source of distress was pain and fatigue. In the study of Wang et al. (2013), it was found that the patients experienced the physical problem mostly. Previous studies show that the most common symptoms of cancer patients were pain and fatigue (Delgado-Guay et al. 2011; Sarıhan et al. 2012; Wang et al. 2013; Cleeland et al. 2013; Minton et al. 2013; Zordan et al. 2014; Yates et al. 2015; Dedeli et al. 2015). It is stated that pain occurred especially in 70% of severe cancer cases and this rate reaches up to 90% in the terminal period in Turkey (Sarıhan et al. 2012). Fatigue is commonly seen in cancer patients and is an important source of distress (Delgado-Guay et al. 2011). Frequency of experiencing fatigue during and after treatment ranges between 4 and 91%, and this perceived fatigue shows a difference based on individual characteristics and emotional state of the patient, the disease, and problems occurring due to treatment (Can 2006). The most frequent emotional problems experienced by these patients were symptoms related to anxiety (i.e. worry, nervousness). Anxiety, feeling sad, anger, and discomfort are most common psychological and cognitive symptoms in cancer (Yates et al. 2015). A previous study demonstrated that emotional problems were most frequently related to anxiety symptoms (i.e. worry, fears, nervousness) rather than depressive symptoms (i.e. sadness, depression, loss of interest) in haematological cancer patients (Musiello et al. 2017). A study conducted in our country shows that symptoms related to anxiety were high in cancer patients. (Gemalmaz and Avşar 2015) In terms of the family problems, the patients were reported to experience problems in dealing with children. Cancer is a disease that requires frequent hospitalization and long-term treatment. In addition, the side effects of the disease and its treatment may also cause experiencing numerous physical and psychological problems. For these reasons, the patients may not be able to fulfil his/her roles and responsibilities in the

family and not able to care about their children much (Altınova and Duyan 2013). Another problem experienced by these patients is the problem of transport in terms of the practical problems. Cancer patients' lack of strength to walk due to the disease or treatment or fear of infection leads them to prefer ambulance services, which cause a financial burden for the patients and families. This is because the social security system in Turkey does not pay such services fully (Altınova and Duyan 2013).

In this study, it was determined that patients using positive religious coping mostly experienced distress less. Another study determined the positive relation between religious behaviours of patients and their mental health and wellness, and a negative relation between religious behaviours of patients and depression symptoms (Holt et al. 2011). Previous studies reported that cancer patients who participated in religious activities associated with religious institutions, such as attending services, being an active member, or participating in activities at those institutions reported, decreased symptom distress (Finney et al. 2014; Ng et al. 2017). It was highlighted that encouraging religious activities could help to reduce psychological distress in cancer patients (Ng et al. 2017). Muslims who are affected by ill health may find that their religion beliefs and approaches can be a source of comfort in alleviating physical and spiritual distress (Rezaei et al. 2008). It is believed that feelings of forgiveness, God's help for him, trusting in God, solely seeking help from God have reduced the distress in the Turkish culture.

Conclusion

Distress levels were higher, and the most common source of distress was physical and emotional problems in cancer patients. It was found that patients using positive religious coping mostly experienced distress less. Handling and managing distress in cancer patients may help patients to cope with many physical problems, which are the source of distress, and improve emotional problems. It is recommended that health professionals should adopt a holistic point of view while collecting data about the patient for treatment and care and they should make evaluation about religious faith as well as physical, social, and psychological problems. Moreover, it is recommended that patients should be supported to receive help for improving positive religious styles.

Limitations

It was a single-centred study with a relatively small sample size, which limited its generalizability. This study was conducted in the east of Turkey. Therefore, it does not represent all the cultural features of the Turkish society. In relation to future research, replicating such studies in other Turkish cultures as well as other countries is required.

Authors' Contributions The first and third authors determined the subject of research, the first author was involved in statistical analysis and manuscript of the research, and the second and third authors contributed to research data collection.

Compliance with Ethical Standards

Conflict of interest The authors declare no conflict of interest.

References

Abrahamson, K. (2010). Dealing with cancer-related distress. *The American Journal of Nursing, 110,* 9–67.

Al Ahwal Shaheen, M., Al Zaben, F., Sehlo, M. G., Khalifa, D. A., & Koening, H. G. (2016). Religious beliefs, practices, and health in colorectal cancer patients in Saudi Arabia. *Psycho-Oncology, 25,* 292–299.

Alaloul, F., Schreiber, J. A., Al Nusairat, T., & Andrykowski, M. (2016). Spirituality in arab muslim hematopoietic stem cell transplantation survivors. *Cancer Nursing, 39,* 39–47.

Altınova, H. H., & Duyan, V. (2013). Oncological social work. *Turkish Journal of Family Medicine and Primary Care, 7,* 40–45. **(in Turkish)**.

Asuzu, C. C., & Elumelu, T. N. (2013). Assessing cancer patients' quality of life and coping mechanisms in Radiotherapy Department of the University College Hospital, Ibadan. *Psycho-Oncology, 22,* 2306–2312.

Ayten, A. (2015). *A psychosocial research on refuge in god/religious coping* (2nd ed.). İstanbul: İz Yayıncılık. **(in Turkish)**.

Bultz, B. D., & Carlson, L. E. (2005). Emotional distress: The sixth vital sign in cancer care. *Journal of Clinical Oncology, 23,* 6440–6441.

Bultz, B. D., & Carlson, L. E. (2010). Emotional distress: The sixth vital sign-future directions in cancer care. *Psycho-Oncology, 15,* 93–95.

Can, G. (2006). Fatigue in cancer patients. *Journal of Nursing Education and Research, 3,* 10–17. **(in Turkish)**.

Carlson, L. E., & Bultz, B. D. (2004). Efficacy and medical cost off set of psychosocial interventions in cancer care: Making the case for economic analyses. *Psycho-Oncology, 13,* 837–849.

Celasin, H., Karakoyun, R., Yılmaz, S., Elhan, A. H., Erkek, B., & Kuzu, M. A. (2011). Quality of life measures in Islamic rectal carcinoma patients receiving counselling. *Colorectal Disease, 13,* 170–175.

Cleeland, C. S., Zhao, F., Chang, V. T., Sloan, J. A., O'Mara, A. M., Gilman, P. B., et al. (2013). The symptom burden of cancer: Evidence for a core set of cancer-related and treatment-related symptoms from the eastern cooperative oncology group symptom outcomes and practice patterns study. *Cancer, 119,* 4333–4340.

Dedeli, O., Yildiz, E., & Yuksel, S. (2015). Assessing the spiritual needs and practices of oncology patients in Turkey. *Holistic Nursing Practice, 29,* 103–113.

Delgado-Guay, M. O., Hui, D., Parsons, H. A., Govan, K., De la Cruz, M., Thorney, S., et al. (2011). Spirituality, religiosity, and spiritual pain in advanced cancer patients. *Journal of Pain and Symptom Management, 41,* 986–994.

Ekşi, H. (2001). *A research on the relationship between coping, religious coping and mental health: Comparison of students from the faculty of education, theology and engineering.* Thesis submitted for the degree of ''Doctor of Social Sciences". Submitted to the Uludağ University (in Turkish).

Estes, J. M., & Karten, C. (2014). Nursing expertise and the evaluation of psychosocial distress in patients with cancer and survivors. *Clinical Journal of Oncology Nursing, 18,* 598–600.

Exline, J. J., Yali, A. M., & Lobel, M. (1999). When God disappoints: Difficulty for giving God and its role in negative emotions. *Journal of Health Psychology, 4,* 364–379.

Finney, J., Hamilton, J. B., Hodges, E. A., Pierre-Louis, B. J., Crandell, J. L., & Muss, H. B. (2014). African American cancer survivors: Do cultural factors influence symptom distress? *Journal of Transcultural Nursing, 26,* 294–300.

Gemalmaz, A., & Avşar, G. (2015). Cancer diagnosis and after experiences: A qualitative study. *Journal of Nursing Education and Research, 12,* 93–98. **(in Turkish)**.

Gil, F., Grassi, L., Travado, L., Tomamichel, M., & Gonzalez, J. R. (2005). Use of distress and depression thermometers to measure psychosocial morbidity among southern European cancer patients. *Supportive Care in Cancer, 13,* 600–606.

Hiçdurmaz, D., & Öz, F. (2013). Spirituality as a dimension of coping. *Journal of Anatolia Nursing and Health Sciences, 16,* 50–5699. **(in Turkish)**.

Holt, C. L., Oster, R. A., Clay, K. S., Urmie, J., & Fouad, M. (2011). Religiosity and physical and emotional functioning among African American and white colorectal and lung cancer patients. *Journal Psychosocial Oncology, 29,* 372–393.

Jacobsen, P. B., & Ransom, S. (2007). Implementation of NCCN distress management guidelines by member institutions. *Journal of the National Comprehensive Cancer Network, 5,* 99–103.

Khalili, N., Farajzadegan, Z., Mokarian, F., & Bahrami, F. (2013). Coping strategies, quality of life and pain in women with breast cancer. *Iranian Journal of Nursing and Midwifery Research, 18,* 105–111.

Kula, N. (2006). A survey on the relationship between the attitudes towards disabled persons and religious attitudes. *Journal of Islamic Research, 19,* 511–524. **(in Turkish)**.

Mansourabadi, A., Moogooei, M., & Nozari, S. (2014). Evaluation of distress and stress in cancer patients in AMIR oncology hospital in Shiraz. *Iranian Journal of Nursing and Midwifery Research, 4,* 131–140.

Mesquita, A. C., Chaves, E. C. L., Avelino, C. C. V., Nogueira, D. A., Panzini, R. G., & Carvalho, E. C. (2013). The use of religious/spiritual coping among patients with cancer undergoing chemotherapy treatment. *Revista latino-americana de enfermagem*, *21*, 539–545.

Minton, O., Berger, A., Barsevick, A., Cramp, F., Goedendorp, M., Mitchell, S. A., et al. (2013). Cancer-related fatigue and its impact on functioning. *Cancer*, *11*, 2124–2130.

Musiello, T., Dixon, G., O'Connor, M., Cook, D., Miller, L., Petterson, A., et al. (2017). A pilot study of routine screening for distress by a nurse and psychologist in an outpatient haematological oncology clinic. *Applied Nursing Research*, *33*, 15–18.

Nairn, R. C., & Merluzzi, T. V. (2003). The role of religious coping in adjustment to cancer. *Psycho-Oncology, 12,* 428–441.

Ng, G. C., Mohamed, S., Sulaiman A. H., & Zainal, N. Z. (2017). Anxiety and depression in cancer patients: The association with religiosity and religious coping. *Journal of Religion Health*, *56*, 575–590.

Özalp, E., Cankurtaran, E. S., Soygür, H., Geyik Özdemir, P., & Jacobsen, P. B. (2007). Screening for psychological distress in Turkish cancer patients. *Psycho-Oncology, 16,* 304–311.

Pargament, K. I. (2002). The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Psychological Inquiry, 13,* 168–181.

Pargament, K. I., Koenig, H. G., & Perez, L. M. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology, 56,* 519–543.

Pargament, K. I., Koenig, H., Tarakeshwar, N., & Hahn, J. (2001). Religious struggle as a predictor of mortality among medically ill elderly patients. *Archives of Internal Medicine, 161,* 1881–1885.

Pranjic, N., Bajraktarevic, A., & Ramic, E. (2016). Distress and PTSD in patients with cancer: Cohort study case. *Materia Sociomedica, 28,* 12–16.

Rezaei, M., Adib-Hajbaghery, M., Seyedfatemi, N., & Hoseini, F. (2008). Prayer in Iranian cancer patients undergoing chemotherapy. *Complementary Therapies in Clinical Practice, 14,* 90–97.

Roth, A. J., Kornblinth, A. B., Batel-Copel, L., Peabody, E., Scher, H. I., & Holland, J. C. (1998). Rapid screening for psychologic distress in men with prostate carcinoma: A pilot study. *Cancer, 82,* 1904–1908.

Ryan, D. A., Gallagher, P., Wright, S., & Cassidy, E. M. (2012). Sensitivity and specificity of the Distress Thermometer and a two-item depression screen (Patient Health Questionnaire-2) with a 'help' question for psychological distress and psychiatric morbidity in patients with advanced cancer. *Psycho-Oncology, 21,* 1275–1284.

Sarıhan, E., Kadıoğlu, E., & İğde, A. F. (2012). Cancer pain and the principles of cancer pain management and world health organization analgesic ladder. *Nobel Medicus, 8,* 5–15. **(in Turkish)**.

Sherman, A. C., Simonton, S., Latif, U., Spohn, R., & Tricot, G. (2005). Religious struggle and religious comfort in response to illness: Health outcomes among stem cell transplant patients. *Journal of Behavioral Medicine, 28,* 359–367.

Shim, E. J., Shin, Y. W., Jeon, H. J., & Hahm, B. J. (2008). Distress and its correlates in Korean cancer patients: Pilot use of the distress thermometer and the problem list. *Psycho-Oncology, 17,* 548–555.

Thuné-Boyle, I. C., Stygall, J., Keshtgar, M. R., Davidson, T. I., & Newman, S. P. (2013). Religious/spiritual coping resources and their relationship with adjustment in patients newly diagnosed with breast cancer in the UK. *Psycho-Oncology, 22,* 646–658.

Trevino, K. M., Balboni, M., Zollfrank, A., Balboni, T., & Prigerson, H. G. (2014). Negative religious coping as a correlate of suicidal ideation in patients with advanced cancer. *Psycho-Oncology, 23,* 936–945.

Ursaru, M., Crumpeib, I., & Crumpeic, G. (2014). Quality of life and religious coping in women with breast cancer. *Procedia—Social and Behavioral Sciences, 114,* 322–326.

Vallurupalli, M., Lauderdale, K., Balboni, M. J., Phelps, A. C., Block, S. D., Ng, A. K., et al. (2012). The role of spirituality and religious coping in the quality of life of patients with advanced cancer receiving palliative radiation therapy. *The Journal of Supportive Oncology, 10,* 81–87.

Wang, Y., Zou, L., Jiang, M., Wei, Y., & Jiang, Y. (2013). Measurement of distress in Chinese in patients with lymphoma. *Psycho-Oncology, 22,* 1581–1586.

Woll, M. L., Hinshaw, D. B., & Pawlik, T. M. (2008). Spirituality and religion in the care of surgical oncology patients with life-threatening or advanced illnesses. *Annals of Surgical Oncology, 15,* 3048–3057.

Yates, P., Miaskowski, C., Cataldo, J. K., Paul, S. M., Cooper, B. A., Alexander, K., et al. (2015). Differences in composition of symptom clusters between older and younger oncology patients. *Journal of Pain and Symptom Management, 49,* 1025–1034.

Zordan, R., Manitta, V., Nandurkar, H., Cole-Sinclair, M., & Philip, J. (2014). Prevalence and predictors of fatigue in haemo-oncological patients. *Internal Medicine Journal, 44,* 1013–1017.