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## **ASSESSING SPIRITUAL WELL-BEING OF ARAB MUSLIM PROSTATE CANCER SURVIVORS: A REFLECTION FOR A NEW SPIRITUAL HEALTH CARE POLICY**

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### **ABSTRACT**

Religious and spiritual beliefs are some of numerous factors that influence quality of life outcome of cancer survivors. Spirituality is believed to be an important component of overall well-being and it is especially significant in relation to how cancer survivors cope with their morbidity. The purpose of this study was to explore spiritual well-being of Arab, Muslim prostate cancer survivors living in Gaza Strip, Palestine.

A cross-sectional design was used in this study using the Spiritual Well-Being Scale (SWBS). A total of 117 Arab, Muslim patients diagnosed with prostate cancer from Gaza Strip participated in this study. Results revealed high scores of SWBS. Score for the total SWBS was 101.16 ( $\pm 5.47$ ) while was 58.91 ( $2.06 \pm$ ) for Religious Well-Being (RWB) subscale and 42.25 ( $\pm 4.58$ ) for Existential Well-Being (EWB) subscale. Scores were not affected by demographic characteristics of participants.

Results of this study revealed high scores of SWBS which serve as a stimulus for health care providers and health policy makers to establish new spiritual health care policy for prostate cancer patients and other patients diagnosed with other types of cancers and other chronic diseases.

**KEYWORDS:** Spiritual Well-Being, Spiritual Care, Spirituality, Gaza Strip, Palestine

### **INTRODUCTION**

Cancer is the second leading cause of death in Palestine and prostate cancer is the second leading cause of cancer-related deaths among men (Ministry of Health, Palestinian Health Information Center, 2014). With the revolution of advanced medical technology we have nowadays and available means for early detection of cancer, the length of survival for cancer patients is continued to increase in the last few decades. For example, the five-year survival rate increased to 94% for patients diagnosed with regional prostate cancer and to 31% for patients with distant metastasis (Parker, Tong, Bolden, & Wingo, 1997). Meanwhile, the ten-year survival rate is 93% and the crude survival rate is 67% (Tewari et al., 2004).

In spite of these accelerated improvements, getting a diagnosis of cancer remains an event that markedly alters the lives of patients and their family members physically and psychologically and leading to premature morbidity and mortality (Clay, Talley, & Young, 2010). Moreover, it yields uncertainty, anxiety, depression, and psychological distress among survivors (Edwards & Clarke, 2004; McBride, Clipp, Peterson, Lipkus, & Demark-Wahnefried, 2000; Rufener,

2011). Such feelings worsen general health status (Rumsfeld et al., 2003) and associated with poor quality of life (Sullivan, Newton, Hecht, Russo, & Spertus, 2004), poor social and physical functioning (Vaccarino, Kasl, Abramson, & Krumholz, 2001), repeated hospitalizations and higher mortality rate (Jiang et al., 2001; Vaccarino et al., 2001) which increases utilization and cost of health care services (Grant et al., 2004; Sullivan et al., 2004). In turn, repeated hospitalizations expose them to higher levels of anxiety and stress (Rieck, 2000).

To cope with these feelings during this critical time, many patients rely on spirituality and religious beliefs to alleviate their stress, maintain hope and sense of meaning and purpose in life, and to retain a sense of control (Koenig, Larson, & Larson, 2001). At the same time, other patients may lose faith in their religious beliefs, therefore; they will seek for alternative methods to alleviate their feelings (Arndt Büssing, Ostermann, & Matthiessen, 2005). Religious and spiritual beliefs are some of numerous factors that influence quality of life outcome of cancer survivors. Spirituality is believed to be an important component of overall well-being and it is especially significant in relation to how cancer survivors cope with their morbidity (Levine & Targ, 2002).

Spiritual well-being was associated with less depression in patients diagnosed with terminal stages of cancer. Since spirituality is important to them and plays a major role in their viewing and coping with their illness, spirituality may affect functioning, quality of life, and the general health status (Jones, O'Connell, & Gray, 2003; Westlake & Dracup, 2001). Numerous studies indicated that spirituality was a major factor in recovery in various diseases and had a major impact on quality of life outcome among cancer survivors (Büssing et al., 2005; Khalsa, 2003; Råholm, 2002; Walton, 2002). Although a few number of studies revealed that spirituality has been associated with some negative feelings such as helplessness, hopelessness, cognitive avoidance, and anxious preoccupation (Cotton, Levine, Fitzpatrick, Dold, & Targ, 1999), there is an evidence from research that spirituality is vital for coping with illness as spiritual well-being provides protection against despair and hopelessness in patients diagnosed with terminal diseases (McClain, Rosenfeld, & Breitbart, 2003; Nelson, Rosenfeld, Breitbart, & Galietta, 2002).

As a result, spirituality has been increasingly recognized as an important component of overall well-being, and is especially a significant factor in how cancer survivors view, live, and cope with their illness (Levine & Targ, 2002). According to Clay, Talley, and Young (2010, p. 16), spirituality is conceptualized as "a broader search for meaning in life, involving a universal power as guide" while spiritual well-being is defined as "the ability to maintain hope and derive meaning from the cancer experience" (Ferrell et al., 1996). The purpose of this study was to explore spiritual well-being of Arab, Muslim prostate cancer survivors living in Gaza Strip, Palestine.

## **METHODOLOGY**

A descriptive, cross-sectional design was used in this study. The study targeted all patients diagnosed with prostate cancer and living in Gaza Strip. A consensus sample was used in this study as the number of all patients diagnosed with prostate cancer is relatively small. All participants were Arabs and Muslims (the population of Gaza Strip is homogenous, all are Arabs, and the great majority are Muslims). Patients were met at the two medical centers that offer oncology care in Gaza Strip. After explaining the purpose of the study to each participant, each participant was asked to sign a consent paper reflecting his agreement to be part of this study. Prior to conducting the study, a permission from the research review board at the ministry of health was obtained to conduct the study.

The instrument used in this study consisted of two parts. The first part included demographic data about the participants, while the second part was the Spiritual Well-being Scale (SWBS). The original SWBS was developed by (Paloutzian & Ellison, 1982). SWBS consists of 20 items that are equality divided into two main subscales: religious well-being (RWB) and existential well-being (EWB). The RWS provides an assessment on one's relationship with God and the sense of comfort derived from this relationship, while the EWB assess one's sense of purpose, infer peace, hopefulness and overall satisfaction (Edmondson, Park, Blank, Fenster, & Mills, 2008; Musa & Pevalin, 2012).

The SWBS is a self-reported scale that is scored on a Likert-Scale format from one (strongly disagree) to six (strongly agree). The highest possible score for SWB scale is 120. Higher scores reflect a higher perception of one's spiritual well-being. Classification of SWB scores is as follows: participants score from 100-120 have high spiritual well-being, while those score between 41-99 have moderate spiritual well-being, and those who score less than 40 are considered to have low spiritual well-being (Abbasi, Farahani-Nia, & Mehrdad, 2014).

SWBS was translated into the Arabic language and validated by Musa and Pevalin (2012) with a Cronbach's alpha of .83 for the entire SWS and .90 and .75 for the RWB and EWB subscales. Musa and Pevalin further added that the scale has the potential to be used outside the Judeo-Christian traditions. Therefore, it can be used to measure spiritual well-beings of Muslims.

Statistical Package of Social Science (SPSS) version 18 was used to analyze data. Before running the analysis, items that were negatively worded were inversed. Data were analyzed using descriptive statistics (mean, standard deviation, frequency, and percentage). Independent *t*-test was used to compare the means in relation to different variables and Pearson correlation was used to detect correlation among some variables of the study.

## RESULTS

### Demographic Characteristics of the Sample

A total of 122 patients diagnosed with prostate cancer were recruited to participate in the study. Of them, a 117 agreed to participate in the study with a response rate of 95.9%. Age of participants ranged between 52 and 89 years with a mean of 71.8 (ST = 7.7) years. Table 1 presents the demographic characteristics of the participants. The majority of patients (65.8%) are over the age of 70 years and most of them (61.5%) had no school or did not finish primary school. The great majority had no other cancer besides prostate cancer and only 23.1% of them are not married.

### Spiritual Well-Being

The results of the Spiritual Well-Being Scale and its subscales are presented in table 2. The score for the total SWBS was 101.16 (±5.47) while was 58.91 (2.06±) for RWB subscale and 42.25 (±4.58) for EWB subscale. The differences between the scores of RWB and EWB were found

**Table 1: Demographic Characteristics of Participants**

	Variable	Frequency	Percentage
Age Category	50-54 Years old	1	.9
	55-59 Years old	4	3.4
	60-64 Years old	16	13.7
	65-69 Years old	19	16.2
	70-74 Years old	33	28.2

	75Years old or more	44	37.6
	<b>Total</b>	<b>117</b>	<b>100</b>
Level of education	No School	40	34.2
	Some education below Primary School	22	18.8
	Finished Primary School	10	8.5
	Finished secondary School	11	9.4
	Finished High school	22	18.8
	Higher Education	12	10.3
	<b>Total</b>	<b>117</b>	<b>100</b>
Marital status	Married	90	76.9
	Not married, widowed or divorced	27	23.1
Other cancer status	Have other cancers	13	11.1
	Free from other cancers	104	88.9

To be statistically significant with a p value of  $> 0.0001$ . Scores of RSW subscales ranged between 5.99 for "I have a personally meaningful relationship with God" and 5.90 for "I believe that God is impersonal and not interested in my daily situations." Scores of EWB subscale ranged between 1.91 for "I feel that life is full of conflict and unhappiness" and 5.92 for "I believe there is some real purpose for my life."

### Factors That Affect Spiritual Well-Being

Pearson's correlation test revealed that level of education and age were not correlated with SWS or its two subscales. Similarly, *t* test revealed that there were no statistically significant differences between the scores of SWS or its subscales between participants who were married and those who were not married or between those who had only prostate cancer and those who had another cancer.

**Table 2: Results of the Spiritual Well-Being Scale**

	Item	Mean	Std. Dev
Religious well-being	Religious Wellbeing (maximum score is 60)	58.91	2.06
	I don't find much satisfaction in private prayer with God.	5.95	.39
	I believe that God loves me and cares about me.	5.96	.24
	I believe that God is impersonal and not interested in my daily situations	5.90	.40
	I have a personally meaningful relationship with God.	5.99	.09
	I don't get much personal strength and support from my God.	5.95	.47
	I feel a sense of well-being about the direction my life is headed in.	5.27	1.26
	I believe that God is concerned about my problems.	5.98	.18
	I don't have a personally satisfying relationship with God.	5.46	1.52
	I feel most fulfilled when I'm in close communion with God.	5.93	.44
	My relation with God contributes to my sense of Well-being.	5.94	.30
		<b>Existential Wellbeing (maximum score is 60)</b>	<b>42.25</b>
Existential well-being	I don't know who I am, where I came from, or where I'm going.	5.91	.56
	I don't enjoy much about life.	2.93	1.52
	I feel that life is a positive experience.	4.01	1.63
	I feel unsettled about my future.	3.85	1.60
	My relationship with God helps me not to feel lonely.	5.85	.60
	I feel that life is full of conflict and unhappiness.	1.91	.93
	I feel very fulfilled and satisfied with life.	5.81	.63
	Life doesn't have much meaning.	3.04	1.86
	I feel good about my future.	3.59	1.50
	I believe there is some real purpose for my life.	5.92	.40
	<b>Spiritual Wellbeing (maximum score is 120)</b>	<b>101.16</b>	<b>5.47</b>

## DISCUSSIONS

Recently, there is more emphasis on the relation between spirituality and spiritual, psychological and physical health, highlighting the importance of the impact of spiritual well-being on health (Clay, et al., 2010; Huitt & Robbins, 2003). Literature reveals that spiritual well-being is positively connected to purpose of life, social support, lower stress levels and lower depression rates (Yi et al., 2006) and has an impact on better health (Bredle, Salsman, Debb, Arnold, & Cella, 2011; Hodge, 2003; Koenig, 2013). Therefore; the current study was conducted to explore spiritual well-being of Arab, Muslim prostate cancer survivors living in Gaza Strip, Palestine. A total of 117 patients diagnosed with prostate cancer participated in the study. In general, results of our study revealed that spiritual well-being scores and its subscales were high. Mean scores of SWBS, RWB, and EWB of this study were 101.16, 58.91, and 42.25 respectively. These findings are consistent with other studies (Bufford, Paloutzian, & Ellison, 1991; Ellison & Smith, 1991; Genia, 2001; Hendricks-Ferguson, 2008; Miller, Fleming, & Brown-Anderson, 1998; Morgan, Gaston-Johansson, & Mock, 2006; Musa & Pevalin, 2012; Peterman, Fitchett, Brady, Hernandez, & Cella, 2002; Rippentrop, Altmaier, & Burns, 2006; Tate & Forchheimer, 2002), who found that scores on the SWBS are high in samples of various religious groups. Moreover, the mean score levels of SWB, RWB, and EWB in our study are similar to other studies using participant diagnosed with various diseases. For example, the mean scores of SWB, RWB, and EWB were high in patients with breast cancer with values of 99.8, 50.8, and 49.1, respectively (Mickley, Soeken, & Belcher, 1992); were high in patients following a coronary artery bypass graft (CABG) surgery 103.9, 58.2, 45.7 respectively (Musa & Pevalin, 2012), were high in kidney transplant recipients with values of 102.1, 48.6, and 53.4, respectively (Martin & Sachse, 2002); and were high in adult primary care patients who seek treatment of acute and/or chronic complaints with values of 93.1, 46.7, and 46.6, respectively (Skye, 1998).

The high level of spiritual well-being among participants of this study may be related to the fact that a significant number of participants were older (mean age=71.8 years), and being married (76.9% of participants). These factors have been associated with reports of higher level of spiritual well-being in different previous studies (Clay, et al., 2010; Meraviglia, 2003; Mystakidou et al., 2008; Peterman et al., 2002). Furthermore, literature revealed that at critical times, such as being diagnosed with prostate cancer, people get closer to the divine (Salman & Zoucha, 2010) and praying becomes useful in facilitating the process of health and promoting the sense of hope during such critical times and during crisis (Doucet & Rovers, 2010).

The mean score for RWB (58.91) was higher than the mean score for EWB (42.25). This difference was found to be statistically significant. Such a difference may reflect the deep belief of Muslim participants in their God (Allah, for Muslims) and their belief in fate and destiny. It also reflects the importance of the vertical aspects of spirituality, which include aspects of relationships between the individual and Allah to Muslim participants. Through this vertical dimension, Muslim patients become closer to Allah and increase their spirituality by adhering to religious practices, such as prayer, fasting, Zakat (the payment of 2.5% of the value of an individual's assets to the poor on a yearly basis), and reading from the Holy Quran (Musa & Pevalin, 2012).

Similar results were reported by another Muslim community of Jordanians who reported a mean score of RWB of 58.2 and a mean score of EWB of 45.7 among patients following a CABG surgery (Musa & Pevalin, 2012). On the other hand, Martin and Sachse (2002) reported inversed values as their participants reported higher mean scores for EWB (48.6)

than the mean scores for RWB (53.4) among kidney transplant recipients. However, other studies reported close values for RWB and EWB. For example RWB and EWB mean scores were 50.8, and 49.1 respectively among breast cancer patients (Mickley et al., 1992) and were 46.7, and 46.6, respectively among adult patients who seek treatment of acute and/or chronic complaints with values of 46.7, and 46.6 respectively (Skye, 1998).

The results of this study revealed that the scores of SWBS and its subscales were not affected by other factors such as the level of education, age, marital status, and presence of other cancer/s. These findings are consistent with other previous studies which reported that social-demographic data did not correlate significantly with SWBS and its subscales' scores (A Büssing, Balzat, & Heusser, 2010; Darvyri et al., 2014). On the contrary, a study conducted by Peterman et al. (2002) revealed that age, gender, marital status, ethnicity, and type of disease had influenced spiritual well-being of participants.

## CONCLUSIONS AND RECOMMENDATIONS

The results of our study revealed high scores of Spiritual Well-Being Scale and its subscales or Religious Well-Being and Existential Well-Being. Scores of RWB were statistically significant higher than scores of EWB. Such differences may require further study to investigate the reasons behind such a difference in the scores. Scores of levels of well-beings were not influenced by other factors such as age, level of education, marital status or having other cancers.

Results of our study provide a preliminary insight into spiritual well-being of Arab Muslim patients diagnosed with prostate cancer. Findings suggest that this understudied population has high levels of overall spiritual well-being. Our findings strengthen similar results from previous studies in breast cancer survivors (Ferrell, Grant, Funk, Otis-Green, & Garcia, 1998) and colorectal and lung cancers (Clay, et al., 2010). Therefore, health care providers, especially those working in oncology, must be aware of spiritual needs and concerns of their clients and integrate spirituality in the care of this understudied population.

By incorporating findings of previous studies in this field, oncology health care providers are in a unique position to advance the future wellbeing of newly-diagnosed cancer survivors by also recognizing the importance that spirituality can have in helping cancer survivors find new meaning and life purpose (Messick-Svare, Hylton, & Albers, 2007). Oncology health care providers should not seek to question whether or not they should attempt to incorporate assessing spiritual needs and providing spiritual care in treatment and survivorship plans of cancer survivors, but rather, they should seek the most effective means of intervention to help cancer survivors move from acute survivorship to long-term, permanent survivorship (Praglin, 2004).

Literature revealed that providing spiritual care acts as greater safeguard shield against depressive symptoms and facilitates better coping by the patients and overall adjustment (Gonzalez et al., 2014) and being associated with a sense of purpose, peace, meaning in life, and relationship (A. Edwards, Pang, Shiu, & Chan, 2010). Results from Gonzalez et al. (2014) study indicate that spiritual well-being can be an asset to cancer survivors as it can serve as a buffer against stress and maladaptive coping.

Moreover, literature revealed that spirituality has been associated with adjustment to cancer (Schnoll, Harlow, & Brower, 2000), positively connected to purpose of life, social support, lower stress, anxiety levels, and lower depression rates (Mueller, Plevak, & Rummans, 2001; Wachholtz, Pearce, & Koenig, 2007; Yi et al., 2006), has a positive impact on

physical (Campbell, Yoon, & Johnstone, 2010; J. M. Nelson, 2009; Park et al., 2013) and mental health (Baetz & Toews, 2009; Dein, Cook, Powell, & Eagger, 2010; Koenig, 2009) as well as health-related quality of life (Balboni et al., 2007; Finkelstein, West, Gobin, Finkelstein, & Wuerth, 2007; Krupski et al., 2006; Vallurupalli et al., 2012), lower levels of discomfort (Leak, Hu, & King, 2008), decreased anxiety and social isolation (Krupski et al., 2006), and has an impact on better health (Bredle et al., 2011; Hodge, 2003; Koenig, 2013). Therefore, assessment of spiritual well-being to screen for spiritual suffering and to identify patients who need spiritual care is an essential component of the multidimensional care of patients (Selman, Harding, Gysels, Speck, & Higginson, 2011; Sulmasy, 2002). Furthermore, results from Lin and Bauer-Wu (2003) suggest that enhancing the sense of Spiritual Well-being will help patients to be cope more effectively with the process of terminal illness and find meaning in the experience.

Other studies associated various religious factors with positive physical and mental health and suggested that aspects of religious involvement in clients' care may reduce mortality (Hummer, Ellison, Rogers, Moulton, & Romero, 2004). A study conducted by Schnall et al. (2010) showed that women who attended a religious service at least once a week had a 20% lower risk of death from all causes, compared with women who did not attend any religious services. Similarly, spirituality has been identified as a significant protective and mediating factor in coping with health problems for participants (Hamilton, Powe, Pollard III, Lee, & Felton, 2007; Newlin, Knafel, & Melkus, 2002). Moreover, several studies identified the role of faith as a coping resource to improve well-being among patients diagnosed with cancer (Hamilton et al., 2007; Morgan et al., 2006; Thoresen & Harris, 2002). Moreover; Gonzalez et al. (2014) recommended the consideration of spiritual well-being in clinical practice to bolster quality of life in cancer survivors, particularly their psychological well-being.

Recently, some recommendations were made in a previous study to raise spiritual concerns of cancer survivors, and that appropriate measures be developed to further explore and validate the importance of the spiritual domain for cancer survivorship (Ameling, & Povilonis., 2001). Therefore; health care policy makers at the top levels should pay more attention to this underestimated domain of care. They should tailor new health care policies that are directed toward promoting spiritual well-being of prostate cancer patients, assessing their spiritual needs and providing spiritual care to this group of patients and other groups of patients with different diagnoses.

## **LIMITATIONS OF THE STUDY**

This study has some limitations that require acknowledgements. First, it is not safe to generalize the results to the whole of Arab, Muslim, or Palestinian populations, as our sample included exclusively citizens of Gaza Strip, Palestine. Also, our sample was comprised of male participants diagnosed with prostate cancer survivors, thus limiting the generalizability of findings to the larger cancer survivorship population.

Second, in our study, we used a cross-sectional, descriptive design which only identified spiritual well-being at a specific point in time. This limitation does not permit assessing spiritual well-being of participants over time and does not provide information whether spiritual well-being will change over time after the diagnosis of cancer was made.

## **Future Research**

Researchers are particularly invited to advance scientific knowledge related to spirituality, spiritual care, and spiritual well-being in survivors of prostate and other cancers. Further research is needed in these areas to develop

spiritually-based therapeutic and lifestyle interventions to potentially treat or ameliorate the physiologic and psychosocial late effects of cancer in general (Aziz, 2002). Furthermore, future outcome studies with this population of cancer survivors and other groups of patients diagnosed with other chronic diseases to explore the impact of enhancing spiritual well-being on various aspects of life and evaluate the relationship between spiritual well-being and psychosocial adjustment and the influence of this relationship on treatment-related outcomes in these populations. Such studies would be of great benefit in assessing the impact of spirituality on overall survivorship and quality of life (Clay, et al., 2010).

Moreover; longitudinal studies are needed to gain a better understanding of the influence of spiritual well-being on psychological well-being. Finally, qualitative studies are needed to understand more fully spiritual well-being among these patients, particularly in populations and countries where this has been minimally studied such as Palestine.

## REFERENCES

1. Abbasi, M., Farahani-Nia, M., & Mehrdad, N. (2014). Nursing students' spiritual well-being, spirituality and spiritual care. *Iranian journal of nursing and midwifery research*, 19(3), 242.
2. Ameling, A., & Povilonis, M. (2001). Spirituality, meaning, mental health, and nursing. *Journal of Psychosocial Nursing & Mental Health Services*, 39(4), 14.
3. Aziz, N. M. (2002). Cancer survivorship research: challenge and opportunity. *The Journal of Nutrition*, 132(11), 3494S-3503S.
4. Baetz, M., & Toews, J. (2009). Clinical implications of research on religion, spirituality, and mental health. *Canadian journal of psychiatry. Revue canadienne de psychiatrie*, 54(5), 292-301.
5. Balboni, T. A., Vanderwerker, L. C., Block, S. D., Paulk, M. E., Lathan, C. S., Peteet, J. R., & Prigerson, H. G. (2007). Religiousness and spiritual support among advanced cancer patients and associations with end-of-life treatment preferences and quality of life. *Journal of Clinical Oncology*, 25(5), 555-560.
6. Bredle, J. M., Salsman, J. M., Debb, S. M., Arnold, B. J., & Cella, D. (2011). Spiritual well-being as a component of health-related quality of life: the functional assessment of chronic illness therapy—spiritual well-being scale (FACIT-Sp). *Religions*, 2(1), 77-94.
7. Bufford, R. K., Paloutzian, R. F., & Ellison, C. W. (1991). Norms for the spiritual well-being scale. *Journal of Psychology and Theology*, 19(1), 56-70.
8. Büssing, A., Balzat, H., & Heusser, P. (2010). Spiritual needs of patients with chronic pain diseases and cancer-validation of the spiritual needs questionnaire. *European journal of medical research*, 15(6), 266.
9. Büssing, A., Ostermann, T., & Matthiessen, P. F. (2005). Role of religion and spirituality in medical patients: confirmatory results with the SpREUK questionnaire. *Health and Quality of Life Outcomes*, 3(1), 10.
10. Campbell, J. D., Yoon, D. P., & Johnstone, B. (2010). Determining relationships between physical health and spiritual experience, religious practices, and congregational support in a heterogeneous medical sample. *Journal of Religion and Health*, 49(1), 3-17.
11. Clay, K., S., Talley, C., & Young, K. B. (2010). Exploring Spiritual Well-Being Among Survivors of Colorectal



- and Lung Cancer. *Journal of Religion & Spirituality in Social Work: Social Thought*, 29(1), 14-32.
12. Clay, K. S., Talley, C., & Young, K. B. (2010). Exploring Spiritual Well-Being Among Survivors of Colorectal and Lung Cancer. *Journal of Religion & Spirituality in Social Work: Social Thought*, 29(1), 14-32.
  13. Cotton, S. P., Levine, E. G., Fitzpatrick, C. M., Dold, K. H., & Targ, E. (1999). Exploring the relationships among spiritual well-being, quality of life, and psychological adjustment in women with breast cancer. *Psycho-Oncology*, 8(5), 429-438.
  14. Darvyri, P., Galanakis, M., Avgoustidis, A. G., Vasdekis, S., Artemiadis, A., Tigani, X., . . . Darviri, C. (2014). The Spiritual Well-Being Scale (SWBS) in Greek Population of Attica. *Psychology*, 5(13), 1575.
  15. Dein, S., Cook, C. C., Powell, A., & Eagger, S. (2010). Religion, spirituality and mental health. *The Psychiatrist*, 34(2), 63-64.
  16. Doucet, M., & Rovers, M. (2010). Generational trauma, attachment, and spiritual/religious interventions. *Journal of Loss and Trauma*, 15(2), 93-105.
  17. Edmondson, D., Park, C. L., Blank, T. O., Fenster, J. R., & Mills, M. A. (2008). Deconstructing spiritual well-being: existential well-being and HRQOL in cancer survivors. *Psycho-Oncology*, 17(2), 161-169.
  18. Edwards, A., Pang, N., Shiu, V., & Chan, C. (2010). The understanding of spirituality and the potential role of spiritual care in end-of-life and palliative care: a meta-study of qualitative research. *Palliative Medicine*.
  19. Edwards, B., & Clarke, V. (2004). The psychological impact of a cancer diagnosis on families: The influence of family functioning and patients' illness characteristics on depression and anxiety. *Psycho-Oncology*, 13(8), 562-576. doi: 10.1002/pon.773
  20. Ellison, C. W., & Smith, J. (1991). Toward an integrative measure of health and well-being. *Journal of Psychology and Theology*, 19(1), 35-48.
  21. Ferrell, B. R., Grant, M., Funk, B., Garcia, N., Otis-Green, S., & Schaffner, M. L. (1996). Quality of life in breast cancer. *Cancer Practice*, 4(6), 331-340.
  22. Finkelstein, F. O., West, W., Gobin, J., Finkelstein, S. H., & Wuerth, D. (2007). Spirituality, quality of life and the dialysis patient. *Nephrology Dialysis Transplantation*, 22(9), 2432-2434.
  23. Genia, V. (2001). Evaluation of the spiritual well-being scale in a sample of college students. *The International Journal for the Psychology of Religion*, 11(1), 25-33.
  24. Gonzalez, P., Castañeda, S. F., Dale, J., Medeiros, E. A., Buelna, C., Nuñez, A., . . . Talavera, G. A. (2014). Spiritual well-being and depressive symptoms among cancer survivors. *Supportive Care in Cancer*, 22(9), 2393-2400.
  25. Grant, E., Murray, S. A., Kendall, M., Boyd, K., Tilley, S., & Ryan, D. (2004). Spiritual issues and needs: perspectives from patients with advanced cancer and nonmalignant disease. A qualitative study. *Palliat Support Care*, 2(4), 371-378.

26. Hamilton, J. B., Powe, B. D., Pollard III, A. B., Lee, K. J., & Felton, A. M. (2007). Spirituality among African American cancer survivors: Having a personal relationship with God. *Cancer Nursing*, 30(4), 309-316.
27. Hendricks-Ferguson, V. (2008). Hope and spiritual well-being in adolescents with cancer. *West J Nurs Res*, 30(3), 385-401.
28. Hodge, D. R. (2003). *Spiritual assessment: A handbook for helping professionals*: North American Association of Christians in Social Work.
29. Huitt, W. G., & Robbins, J. L. (2003). *An introduction to spiritual development*. Paper presented at the 11th Annual Conference: Applied Psychology in Education, Mental Health, and Business, Valdosta, GA, October.
30. Hummer, R. A., Ellison, C. G., Rogers, R. G., Moulton, B. E., & Romero, R. R. (2004). Religious involvement and adult mortality in the United States: review and perspective. *South Med J*, 97(12), 1223-1230.
31. Jiang, W., Alexander, J., Christopher, E., Kuchibhatla, M., Gaulden, L. H., Cuffe, M. S., . . . Krishnan, R. R. (2001). Relationship of depression to increased risk of mortality and rehospitalization in patients with congestive heart failure. *Archives of internal medicine*, 161(15), 1849-1856.
32. Jones, A. M., O'Connell, J. E., & Gray, C. S. (2003). Living and dying with congestive heart failure: addressing the needs of older congestive heart failure patients. *Age Ageing*, 32(6), 566-568.
33. Khalsa, D. S. (2003). The integration of health and spirituality: Report on the groundbreaking conference. *Total Health*, 25(3), 36-38.
34. Koenig, H. G. (2009). Research on religion, spirituality, and mental health: A review. *Canadian Journal of Psychiatry*, 54(5), 283-291.
35. Koenig, H. G. (2013). *Spirituality in patient care: Why, how, when, and what*: Templeton Foundation Press.
36. Koenig, H. G., Larson, D. B., & Larson, S. S. (2001). Religion and coping with serious medical illness. *Annals of Pharmacotherapy*, 35(3), 352-359.
37. Krupski, T. L., Kwan, L., Fink, A., Sonn, G. A., Maliski, S., & Litwin, M. S. (2006). Spirituality influences health related quality of life in men with prostate cancer. *Psycho-Oncology*, 15(2), 121-131.
38. Leak, A., Hu, J., & King, C. R. (2008). Symptom distress, spirituality, and quality of life in African American breast cancer survivors. *Cancer Nursing*, 31(1), E15-E21.
39. Levine, E. G., & Targ, E. (2002). Spiritual correlates of functional well-being in women with breast cancer. *Integrative Cancer Therapies*, 1(2), 166-174.
40. Lin, H. R., & Bauer-Wu, S. M. (2003). Psycho-spiritual well-being in patients with advanced cancer: an integrative review of the literature. *J Adv Nurs*, 44(1), 69-80.
41. Martin, J. C., & Sachse, D. S. (2002). Spirituality characteristics of women following renal transplantation. *Nephrology nursing journal*, 29(6), 577.
42. McBride, C. M., Clipp, E., Peterson, B. L., Lipkus, I. M., & Demark-Wahnefried, W. (2000). Psychological

- impact of diagnosis and risk reduction among cancer survivors. *Psycho-Oncology*, 9(5), 418-427. doi: 10.1002/1099-1611(200009/10)9:5<418::AID-PON474>3.0.CO;2-E
43. McClain, C. S., Rosenfeld, B., & Breitbart, W. (2003). Effect of spiritual well-being on end-of-life despair in terminally-ill cancer patients. *The Lancet*, 361(9369), 1603-1607.
  44. Meraviglia, M. G. (2003). *The effects of spirituality on well-being of people with lung cancer*. Paper presented at the Oncol Nurs Forum.
  45. Messick-Svare, G., Hylton, M., & Albers, E. (2007). On our own: Social workers talk about spiritually-sensitive practice within an organizational context. *Journal of Religion & Spirituality in Social Work: Social Thought*, 26(4), 95-113.
  46. Mickley, J. R., Soeken, K., & Belcher, A. (1992). Spiritual well-being, religiousness and hope among women with breast cancer. *Image: The Journal of Nursing Scholarship*, 24(4), 267-272.
  47. Miller, G., Fleming, W., & Brown-Anderson, F. (1998). Spiritual Well-Being Scale ethnic differences between Caucasians and African-Americans. *Journal of Psychology and Theology*, 26(4), 358-364.
  48. Ministry of Health, Palestinian Health Information Center. (2014). *Health Status in Palestine 2013*. Palestine: Ministry of Health.
  49. Morgan, P. D., Gaston-Johansson, F., & Mock, V. (2006). Spiritual well-being, religious coping, and the quality of life of African American breast cancer treatment: a pilot study. *ABNF Journal*, 17(2), 73.
  50. Mueller, P. S., Plevak, D. J., & Rummans, T. A. (2001). *Religious involvement, spirituality, and medicine: implications for clinical practice*. Paper presented at the Mayo clinic proceedings.
  51. Musa, A. S., & Pevalin, D. J. (2012). An Arabic version of the spiritual well-being scale. *International Journal for the Psychology of Religion*, 22(2), 119-134.
  52. Mystakidou, K., Tsilika, E., Parpa, E., Hatzipli, I., Smyrnioti, M., Galanos, A., & Vlahos, L. (2008). Demographic and clinical predictors of spirituality in advanced cancer patients: a randomized control study. *Journal of Clinical Nursing*, 17(13), 1779-1785.
  53. Nelson, C. J., Rosenfeld, B., Breitbart, W., & Galietta, M. (2002). Spirituality, religion, and depression in the terminally ill. *Psychosomatics*, 43(3), 213-220.
  54. Nelson, J. M. (2009). Religion, spirituality, and physical health *Psychology, religion, and spirituality* (pp. 311-345): Springer.
  55. Newlin, K., Knafl, K., & Melkus, G. D. E. (2002). African-American spirituality: A concept analysis. *Advances in Nursing Science*, 25(2), 57-70.
  56. Paloutzian, R., & Ellison, C. (1982). Loneliness, spiritual well-being, and quality of life. In L. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy*. (pp. 224-237). New York: Wiley Interscience.

57. Park, N. S., Lee, B. S., Sun, F., Klemmack, D. L., Roff, L. L., & Koenig, H. G. (2013). Typologies of religiousness/spirituality: Implications for health and well-being. *Journal of Religion and Health*, 52(3), 828-839.
58. Parker, S. L., Tong, T., Bolden, S., & Wingo, P. A. (1997). Cancer statistics, 1997. *CA: A Cancer Journal for Clinicians*, 47(1), 5-27.
59. Peterman, A. H., Fitchett, G., Brady, M. J., Hernandez, L., & Cella, D. (2002). Measuring spiritual well-being in people with cancer: the functional assessment of chronic illness therapy—Spiritual Well-being Scale (FACIT-Sp). *Annals of behavioral medicine*, 24(1), 49-58.
60. Praglin, L. J. (2004). Spirituality, religion, and social work: An effort towards interdisciplinary conversation. *Journal of Religion & Spirituality in Social Work: Social Thought*, 23(4), 67-84.
61. Råholm, M.-B. (2002). Weaving the fabric of spirituality as experienced by patients who have undergone a coronary bypass surgery. *Journal of Holistic Nursing*, 20(1), 31-47.
62. Rieck, S. B. (2000). The relationship between the spiritual dimension of the nurse-patient relationship and patient well-being.
63. Rippentrop, A. E., Altmaier, E. M., & Burns, C. P. (2006). The relationship of religiosity and spirituality to quality of life among cancer patients. *Journal of Clinical Psychology in Medical Settings*, 13(1), 29-35.
64. Rufener, D. (2011). Inner Strength in Cancer Survivors: The Role of Spirituality in Establishing Connectedness.
65. Rumsfeld, J. S., Havranek, E., Masoudi, F. A., Peterson, E. D., Jones, P., Tooley, J. F., . . . Spertus, J. A. (2003). Depressive symptoms are the strongest predictors of short-term declines in health status in patients with heart failure. *J Am Coll Cardiol*, 42(10), 1811-1817.
66. Salman, K., & Zoucha, R. (2010). Considering faith within culture when caring for the terminally ill muslim patient and family. *Journal of Hospice & Palliative Nursing*, 12(3), 156-163.
67. Schnall, E., Wassertheil-Smoller, S., Swencionis, C., Zemon, V., Tinker, L., O'Sullivan, M. J., . . . Goodwin, M. (2010). The relationship between religion and cardiovascular outcomes and all-cause mortality in the Women's Health Initiative Observational Study. *Psychology and Health*, 25(2), 249-263.
68. Schnoll, R. A., Harlow, L. L., & Brower, L. (2000). Spirituality, demographic and disease factors, and adjustment to cancer. *Cancer Practice*, 8(6), 298-304.
69. Selman, L., Harding, R., Gysels, M., Speck, P., & Higginson, I. J. (2011). The measurement of spirituality in palliative care and the content of tools validated cross-culturally: a systematic review. *J Pain Symptom Manage*, 41(4), 728-753.
70. Skye, C. (1998). Spiritual well-being of primary care clients and their perceptions of spiritual care by primary care providers. *Unpublished master's thesis, Clarkson College*.
71. Sullivan, M. D., Newton, K., Hecht, J., Russo, J. E., & Spertus, J. A. (2004). Depression and health status in elderly patients with heart failure: a 6-month prospective study in primary care. *Am J Geriatr Cardiol*, 13(5), 252-260.

72. Sulmasy, D. P. (2002). A biopsychosocial-spiritual model for the care of patients at the end of life. *The gerontologist*, 42(suppl 3), 24-33.
73. Tate, D. G., & Forchheimer, M. (2002). Quality of life, life satisfaction, and spirituality: Comparing outcomes between rehabilitation and cancer patients. *American Journal of Physical Medicine & Rehabilitation*, 81(6), 400-410.
74. Tewari, A., Johnson, C. C., Divine, G., Crawford, E. D., Gamito, E. J., Demers, R., & Menon, M. (2004). Long-term survival probability in men with clinically localized prostate cancer: a case-control, propensity modeling study stratified by race, age, treatment and comorbidities. *Journal of Urology*, 171(4), 1513-1519. doi: 10.1097/01.ju.0000117975.40782.95
75. Thoresen, C. E., & Harris, A. H. (2002). Spirituality and health: What's the evidence and what's needed? *Annals of behavioral medicine*, 24(1), 3-13.
76. Vaccarino, V., Kasl, S. V., Abramson, J., & Krumholz, H. M. (2001). Depressive symptoms and risk of functional decline and death in patients with heart failure. *J Am Coll Cardiol*, 38(1), 199-205.
77. Vallurupalli, M. M., Lauderdale, M. K., Balboni, M. J., Phelps, A. C., Block, S. D., Ng, A. K., . . . Balboni, T. A. (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(2), 81.
78. Wachholtz, A. B., Pearce, M. J., & Koenig, H. (2007). Exploring the relationship between spirituality, coping, and pain. *Journal of behavioral medicine*, 30(4), 311-318.
79. Walton, J. (2002). Discovering meaning and purpose during recovery from an acute myocardial infarction. *Dimensions of Critical Care Nursing*, 21(1), 36-43.
80. Westlake, C., & Dracup, K. (2001). Role of spirituality in adjustment of patients with advanced heart failure. *Progress in cardiovascular nursing*, 16(3), 119-125.
81. Yi, M. S., Mrus, J. M., Wade, T. J., Ho, M. L., Hornung, R. W., Cotton, S., . . . Tsevat, J. (2006). Religion, spirituality, and depressive symptoms in patients with HIV/AIDS. *J Gen Intern Med*, 21(S5), S21-S27.

