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## Impact of Spiritual Well-Being, Spiritual Perspective, and Religiosity on the Self-Rated Health of Jordanian Arab Christians

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### **Abstract**

The purpose of this study was to explore associations of spiritual well-being, spiritual perspective, and religiosity with self-rated health in a convenience sample of 340 adult Jordanian Arab Christians. Data were collected through church and community groups. Results indicated that spiritual well-being and religiosity were positively associated with self-rated health, but in the final regression model only spiritual well-being retained a significant association after controlling for the other spiritual and religious measures. In conclusion, spirituality and religiosity are important to Jordanian Arab Christians' health and well-being and the implications for nursing practice are explored.

**Keywords:** Jordanian Arab Christians, spiritual well-being, spiritual perspective, religiosity, self-rated health.

## Introduction

The number of research studies on religiosity, spirituality and health has increased dramatically since the mid-1990s (Koenig, 2012). Research has consistently shown significant associations between religiosity, spirituality, and better health outcomes (Aldwin, Park, Jeong, & Nath, 2014; Koenig, 2012; Tiew & Creedy, 2010). There is a consensus in the nursing literature that spirituality is an important dimension of humanity and spiritual care is a part of good nursing (Biro, 2012). Nursing is responsible for providing holistic care that covers the biological, mental, emotional, social and spiritual dimensions of human beings and health (Biro, 2012; Nascimento et al., 2013). The Jordanian Nursing Care Standards (2005) state that the total assessment of patients' health needs must include an assessment of their spiritual needs. The importance and interlink of spirituality, nursing and health in an individual's life processes increases the desire of many nurses to include spiritual care in their clinical practice (Meehan, 2012). A nurse needs to know about spirituality and its importance to deal with spiritual issues raised by patients (Hussey, 2009).

In this study, the associations between spiritual well-being, spiritual perspective, and religiosity on the self-rated health in a sample of Jordanian Arab Christians were investigated. Spiritual well-being was defined by Ellison's (1983) as a state of spiritual health in terms of a religious dimension that refers to a person's sense of well-being in relation to God and an existential dimension which refers to a person's sense of purpose and satisfaction in life, and life direction. Spiritual perspective was defined as the degree to which an individual holds spiritual views and engages in spirituality-related interactions (Reed, 1987). Religiosity was defined by The North American Nursing Diagnosis Association, International (2009, p. 299) as "the ability to increase reliance on religious beliefs and/or participate in rituals of a particular faith tradition."

A substantial body of research has documented the associations of spiritual well-being, spiritual perspective, and religiosity with measures of health and well-being. Empirical studies reveal that among patients and healthy adults higher levels of spiritual well-being is associated with higher levels of overall self-rated health (Yi et al., 2007); better psychological well-being, subjective well-being, physical symptoms (Lawler-Row & Elliott, 2009); and more positive self-perception of health (Arnold, Herrick, Pankratz, & Mueller, 2007). Similarly, a growing body of research has found that spiritual perspective is positively associated with psychological well-being (Greenfield, Vaillant, & Marks, 2009) and is associated with overcoming anxiety, depression, and generalized stress in pregnant women (Dailey & Stewart, 2007). However, other studies have found that spiritual perspective was not associated with self-rated overall health (Dailey & Stewart, 2007; Dunkin & Dunn, 2009).

Religiosity has also been studied as a correlate of well-being and health. A number of studies reveal that religiosity and some aspects of religious involvement are associated with higher levels of women's overall self-rated health (McCullough & Laurenceau, 2005) and better physical and mental health (Koenig, 2012). Using Arab Christian samples, similar to the sample of the present study, but in different countries, it has been found that greater religiosity was associated with higher levels of psychological and social well-being among the Christian Palestinian minority in Israel (Abu-Rayya & Abu-Rayya, 2009); optimism, positive emotions, and less depression among Arab Muslims and Christians in the USA (Meshreki, 2008).

Given these benefits of spiritual well-being, spiritual perspective and religiosity to health outcomes, it is important to better understand how these variables relate to each other, particularly within certain cultural and religious groups, such as the Arab Christians in the Arab-Islamic culture in the current study. The importance of investigating religiosity and

spirituality in the context of health as separate concepts was stressed in the literature (Aldwin et al., 2014). A number of studies have found that religiosity is related positively to spiritual well-being among college students (Patel, Ramgoon, & Paruk, 2009), nurses (Dunn, Handley, & Dunkin, 2009) and Arab Muslim cardiac patients (Musa & Pevalin, 2012). Spiritual perspective has been found to be positively associated with spiritual well-being using samples of female kidney transplant recipients (Martin & Sachse, 2002) and registered nurses (Dunn et al., 2009).

The effects of religiosity and spiritual perspective on health outcomes might be mediated by the effect of spiritual well-being on health. The pathways through which religiosity and spirituality can affect health are still underdeveloped in the literature (Aldwin et al., 2014). However, a number of research studies have proposed a variety of mediators. For example, Koenig (2008) proposed that it is through the psychological health including meaning, purpose, connectedness, hope, and well-being that religiosity and spirituality influence health outcomes. Other authors have proposed that religiosity and spirituality influence health outcomes through behavioral and emotional regulation (Aldwin et al., 2014), better coping strategies, supporting positive beliefs, encouraging transcendence experiences (Nelson, 2009), religious meaning, and forgiveness in times of crisis and illness (Park, 2012). It appears that components of spiritual well-being are possible mediators to the associations between religiosity, spiritual perspective, and health. However, no research study was found that investigated the concept of total spiritual well-being as a possible mediator.

The vast majority of published research studies of spiritual well-being, spiritual perspective, religiosity, and health have been carried out on Western populations, mainly in the USA (Koenig, Al Zaben, & Khalifa, 2012). With this focused population limitation and cultural variations, it is important to study these concepts among different ethnic groups and cultures (Shores, 2010). Spirituality and religion are embedded within cultural norms (Bhui, King, Dein, & O'Connor, 2008; Campesino, Belyea, & Schwartz, 2009). Health research on spirituality and religiosity using Arab Christian samples is scarce. There has been no previous study investigating the associations amongst spiritual well-being, spiritual perspective, religiosity, and health using an Arab Christian sample anywhere, including Jordan. Therefore, the purpose of this study was to explore the associations of spiritual well-being, spiritual perspective, and religiosity on self-rated health amongst Jordanian Arab Christians.

## **Methods**

A cross-sectional descriptive and correlational design was used for this study. A convenience sample of 340 Jordanian Arab Christians was recruited from the adult community population in northeast Jordan. Data were collected during a two-month period starting in December 2011. Inclusion criteria required participants who were 18 years of age or older, who could read, write, and clearly understand the Arabic language, and who were physically and psychologically able to complete the questionnaire.

Jordan is one of the most technologically and socially developed countries in the Middle East. It is a small lower-middle income country with limited natural resources. The population in 2012 was estimated at 6.3 million (Department of Statistics, 2012). Approximately 98% of the population is Arab. Sunni Muslims are the largest religious group (95%) and Christians comprise approximately 3% of population (US Department of State, 2011). Jordanian Arab Christians are one of the oldest Christian communities and have a

high level of religious and spiritual freedom. They are well integrated in Jordanian society and generally have a friendly and peacefully relationship with Muslims.

### **Procedure**

Permission was obtained to use Reed's (1986) Spiritual Perspective Scale (SPS) and the Arabic version of Ellison's (1983) Spiritual Well-Being Scale (SWBS) for this study. Approval was granted from the Institutional Review Board of a Jordanian governmental university. Arabic language questionnaires were distributed through church and community meetings. These meetings were identified by the research assistants who are Arab Christian clergy and live in each targeted city and whom have the ability to contact a large number of Arab Christian people. All interested adult Arab Christians were invited to participate. Consent was implied by completion of the questionnaire as well as participants giving verbal consent. All participants in this study were informed that participation was voluntary. Participants were asked to return questionnaires to the researcher at the time of meeting or within one week. Questionnaires required about 20–25 minutes to complete. The response rate was high (90% of 380 distributed questionnaires). Ultimately, 345 questionnaires were completed and returned, of which five were discarded because of missing basic information or they used a fixed pattern of responses, leaving a final sample of 340.

### **Measures**

The socio-demographic data included information on age, gender, education, marital status, and income. Self-report questionnaires were used to measure spiritual well-being, spiritual perspective, and religiosity.

**Religiosity.** Religiosity was measured in two ways: first, by items covering religious behavior and, second, by items concerning religious attitudes (Makros & McCabe, 2003). Religious behavior items consisted of four 5-point Likert-type questions asking participants about the frequency of their private prayer, Church attendance, bible reading, and meditating. One 5-point item ranging from 'Unimportant' to 'Very important' was designed to measure religious attitudes and asked the participants about the importance of their faith to them. All religious behavior and attitudes items were used to measure overall religiosity. The total scores of the religiosity range from 5 to 25, with a higher score representing greater religiosity. This scale was developed by one of the authors (AM) based on a literature review and the judgments of an expert panel. Items of this scale were tested and revised by Arab Christian bilingual experts including two members with PhD degrees and one Christian clergyman psychologist. In the current study, the internal consistency for the religiosity scale was acceptable with alpha coefficient of 0.73. Moreover, the significant positive correlation between the religiosity scale and both the spiritual well-being and spiritual perspective measures, as theoretically expected, provided evidence of convergent-related validity for this scale.

**Spiritual Well-Being Scale.** The Spiritual Well-Being Scale (SWBS) is 20-item self-report instrument. Each item is answered on a 6-point Likert scale ranging from 'strongly agree' to 'strongly disagree'. The SWBS consists of two subscales: Religious Well-Being (RWB) and Existential Well-Being (EWB). Ten items are designed to measure RWB and contain the word "God" and 10 items measure EWB and ask about concepts such as life satisfaction, meaning, and direction. Items from each subscale are presented alternately. The overall score from the SWBS is computed by summing responses to all twenty items after reversing the negatively worded items. The total scores of the SWBS range from 20 to 120, with a higher score representing greater well-being. Face validity and construct validity

using exploratory factor analysis and convergent-related validity have been demonstrated for the SWBS (Ellison, 1983). The factor analysis revealed a two-factor solution for the SWBS, as hypothesized by the scale developers. Moreover, the SWBS and its subscales, as theoretically expected, were correlated negatively with the Abbreviated Loneliness Scale, and positively with the Purpose of Life Test, Intrinsic Religious Orientation, and Self-Esteem (Ellison, 1983).

The Arabic version of the SWBS was developed by, and reported in, Musa and Pevalin (2012). The authors used asymmetrical back-translation methods with an expert panel to convert from English to Arabic, piloted it on Jordanian college students, and reported evidence of construct validity of the final Arabic version using a sample of Arab Muslim cardiac patients. Evidence of acceptable psychometric properties of the Arabic version of the SWBS has been reported by analyzing its internal structure using a sample of Jordanian Arab Christians (Musa & Pevalin, 2014). The internal consistency of the Arabic SWBS was high, with alpha coefficient of 0.87. The resultant three-factor structure of the Arabic SWBS using exploratory factor analysis were psychometrically sound in terms of obtaining a simple factor structure, easily interpretable, and had conceptual meaning.

**Spiritual Perspective Scale.** The Spiritual Perspective Scale (SPS) was designed by Reed (1986) to measure levels of participants' spiritual perspectives. The SPS is 10-item self-report instrument. It consists of two dimensions, which are expressions of spirituality (four items) and spiritual values (six items). Each item in the first dimension is answered on a 6-point Likert scale ranging from 'not at all' (1), to 'about once a day' (6). Each item in the second dimension is answered on a 6-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (6). The total scores of the SPS range from 10 to 60 with higher scores representing a greater spiritual perspective. Criterion and discriminant validity have been demonstrated for this scale (Reed, 1987). Internal reliability coefficients utilizing Cronbach's Alpha for the SPS have been consistently high (0.86 – 0.94) in adult populations (Campesino et al., 2009; Dailey & Stewart, 2007; Dunkin & Dunn, 2009; Pelleg & Leichtentritt, 2009; Reed, 1986, 1987; Shores, 2010).

**Self-Rated Health.** Self-Rated Health (SRH) is single item that uses a 5-point Likert scale and it is commonly used to measure participants' overall health according to their general estimation and feeling. This item asks participants to rate their overall health on a 5-point scale, ranging from 'being poor' (1), 'being fair' (2), 'being good' (3), 'being very good' (4), to 'being excellent' (5). Despite the simplicity of this measure, it has been shown to be a useful and effective independent predictor of health and well-being, mortality, morbidity, and physical, psychological, and social aspects of the individual's health (McCullough & Laurenceau, 2004, 2005; Schuring, Burdorf, Kunst, Voorham, & Mackenbach, 2009). A study by Abdel-Khalek (2010) reported that the one-week test-retest reliability of the SRH item was 0.74 indicating high temporal stability.

## Translation

Translation was performed for the SPS due to the lack of a valid and reliable version in Arabic. The instrument was translated from English into Arabic using the asymmetrical translation approach by back-translation and translation by committee methods (Jones, Lee, Philips, Zhang, & Jaceldo, 2001). Asymmetrical translation emphasizes loyalty to the source (original) instrument and its concepts during the translation process (Jones et al., 2001). This process retains the meaning and structure of the instrument and its items whilst making appropriate adaptations suitable for another culture. The translation process was performed by several bilingual Christian and Muslim experts holding doctoral degrees in various

specialties including applied linguistics (English language and Arabic language), nursing, modern languages, and one Christian clergyman psychologist. They ensured the content and semantic equivalence of the scale, as well as assessing the language complexity and readability of the items for Arab Christians. A pretest on a convenience sample of 20 Arab Christians indicated that the scale items were suitable, not confusing, and easy to complete.

### Analysis

Descriptive statistics, bivariate analysis, and multivariate regression analysis were used to analyze the data using SPSS version 19. Pearson's  $r$  was used to examine associations between spiritual well-being, spiritual perspective, religiosity, and self-rated health. To determine the significant predictors of the dependent variables in this study (spiritual well-being and self-rated health), linear multivariate regressions were performed. The level of significance for all bivariate and multivariate tests was set at  $p < 0.05$ . Two regression models were used to estimate the effect of the independent variables first on spiritual well-being and, second, on self-rated health. This process of modeling was considered appropriate to investigate the pathways to self-rated health, given that previous research on spiritual well-being has found to be a predominant coping strategy to improve health. All scales were examined for normality using histograms, the Shapiro-Wilk test, and Z-scores of Skewness and Kurtosis. Z-scores above +1.96 or below -1.96 are significantly skewed or kurtosed and not normally distributed (Field, 2005; Munro, 2005). The SWBS was reasonably normally distributed whereas scores on all other scales had statistically significant negative skew (see Table 1). All non-normal distribution scales were transformed to create a more normal distribution suitable for parametric statistical analysis. The internal consistency reliability values for all scales were acceptable to high, with alpha coefficients ranging from 0.73 to 0.87.

### Results

The age of participants ranged between 18 and 72 years ( $M=36.2$ ,  $SD=12.3$ ). Most of participants were female (68.8%,  $n=234$ ) and married (60.3%,  $n=205$ ) with 38.5% ( $n=131$ ) being single. Only 27.9% ( $n=95$ ) reported a level of income of less than 400 JD per month. Almost half of the participants had an undergraduate level of education (49.1%,  $n=167$ ) and others varied in level of education from having secondary to high school level (19.7%,  $n=67$ ), college level (20.9%,  $n=71$ ), to postgraduate level (10.3%,  $n=35$ ). Mean, standard deviation, range, Z-scores of Skewness and Kurtosis, and Cronbach's alpha (where applicable) of the SWBS, SPS, religiosity, and SRH are shown in Table 1.

Table 1 *Descriptive statistics of the Arabic SWBS, SPS, Religiosity, and SRH. Jordanian Arab Christian community sample, N=340*

Scale	No. of items	Mean	SD	Min	Max	Skewness Z value	Kurtosis Z value	Cronbach's alpha
Religiosity	5	18.0	3.7	7	25	-3.55	-1.56	0.73
SWBS	20	95.2	13.1	54	120	-2.80	-1.64	0.87
SPS	10	47.6	8.0	13	60	-5.70	+1.72	0.85
SRH	1	4.9	0.9	1	6	-5.47	+2.25	-

Notes: SD, standard deviation; SWBS, Spiritual Well-Being Scale; SPS, Spiritual Perspective Scale; SRH, Self-Rated Health

Self-rated health had a statistically significant low positive correlation with the spiritual well-being ( $r = 0.20$ ,  $p < 0.001$ ) and religiosity ( $r = 0.13$ ,  $p < 0.05$ ), and a non-significant correlation with spiritual perspective. Spiritual well-being had a statistically significant moderate positive correlation with spiritual perspective ( $r = 0.60$ ,  $p < 0.001$ ) and religiosity ( $r = 0.49$ ,  $p < 0.001$ ). Spiritual perspective had a moderate, significant correlation with religiosity ( $r = 0.60$ ,  $p < 0.001$ ). All correlation coefficient values among spiritual well-being, spiritual perspective, religiosity, and self-rated health are shown in Table 2.

Table 2 *Correlations between the SWBS, SPS, Religiosity, Age, and SRH. Jordanian Arab Christian community sample, N=340*

	SRH	SWBS	SPS
SWBS	0.20**		
SPS	0.09	0.60**	
Religiosity	0.13*	0.49**	0.60**

Notes: \* $p < 0.05$  (2-tailed); \*\* $p < 0.01$  (2-tailed); SWBS, Spiritual Well-Being Scale; SPS, Spiritual Perspective Scale; SRH, Self-Rated Health

Results of the multivariate regression models are presented in Table 3. In Model 1, both spiritual perspective and religiosity have large, positive, and statistically significant effects on spiritual well-being. Only gender has a significant effect from the socio-demographic controls with females having significantly lower spiritual well-being. In Model 2, age and education have significant effects on self-rated health. The coefficient for age is negative indicating that older respondents report lower self-rated health and the education coefficient is positive indicating that more educated respondents report higher self-rated health. The spiritual perspective and religiosity variables are non-significant while the spiritual well-being has a moderate, positive and statistically significant effect on self-rated health. These results suggest that the influence of spiritual perspective and religiosity on self-rated health operate through spiritual well-being with no direct effects to self-rated health.

Table 3 *Multiple Regression Analyses for SWBS and SRH. Jordanian Arab Christian community sample, N=340, standardized regression coefficients.*

	Model 1 SWBS	Model 2 SRH
Independent variables	$\beta$	$\beta$
Age	0.01	-0.32**
Female	-0.12**	-0.03
Education <sup>a</sup>	0.03	0.14*
Married <sup>b</sup>	0.05	-0.01
Religiosity	0.28**	0.05
SPS	0.43**	-0.05
SWBS		0.24**
Model R <sup>2</sup>	0.40	0.18

Notes: \* $p < 0.05$  (2-tailed); \*\* $p < 0.01$  (2-tailed); <sup>a</sup> dichotomous variable undergraduate and postgraduate education, ref. cat. other; <sup>b</sup> dichotomous variable married, ref. cat. not married; SWBS, Spiritual Well-Being Scale; SPS, Spiritual Perspective Scale; SRH, Self-Rated Health

## Discussion

The main finding of this study is that among Jordanian Arab Christians spiritual well-being and religiosity are positively associated with self-rated health, but in the final regression model only spiritual well-being retains a significant association with self-rated health controlling for the other spiritual and religious measures. The regression model also demonstrated that religiosity and spiritual perspective are positively associated with spiritual well-being. Together, these results suggest that there is an indirect influence of religiosity and spiritual perspectives on self-rated health through spiritual well-being.

This is the first study to explore the associations of spiritual well-being, spiritual perspective, and religiosity on health in a community sample of Jordanian Arab Christian adults. Therefore, it expanded the knowledge of how a particular culture, ethnicity, and/or religious affiliation shape responses of individuals to spiritual well-being, spiritual perspective, religiosity, and health. Moreover, it is the first study to suggest the indirect effects of religiosity and spiritual perspective on health through spiritual well-being. In addition, this study by using various ways to measure spirituality and religiosity strengthens the evidence of associations between them and health. Also, the distributions of scores across the variables of this study are the first preliminary findings of population norms for the SWBS, SPS, religiosity, and SRH in Arab Christians.

The scores obtained from the SWBS, SPS, religiosity and SRH, revealed that Jordanian Arab Christians had high average levels of spiritual well-being, spiritual perspectives, religiosity, and self-rated health (see Table 1). These findings are consistent with other studies conducted in Arab-Islamic culture using a Muslim patient sample (Musa & Pevalin, 2012) and in Western cultures using various Christian samples, including healthy and ill participants (Arnold et al., 2007; Campesino et al., 2009; Dailey & Stewart, 2007; Dunkin & Dunn, 2009; Dunn et al., 2009). However, the mean value of SRH in this study was slightly higher than levels in other studies conducted in the Arabic and Western cultures. For example, the mean score of the SRH measure was 4.1 in Arab Muslim college students (Abdel-Khalek, 2010); and it ranged from 4.1 to 4.3 in various adult American populations (Dailey & Stewart, 2007; McCullough & Laurenceau, 2004, 2005; Yi et al., 2007).

The positive associations between spiritual well-being, religiosity, and self-rated health are consistent with other studies of primary care house officers (Yi et al., 2007) and in an adult community population in the USA (McCullough & Laurenceau, 2005). Considering that the SRH measure is a useful and effective independent predictor of various aspects of the individual's health and well-being, findings in this study are comparable and support findings of other studies which revealed that a higher level of spiritual well-being is associated with better health and well-being (Arnold et al., 2007; Lawler-Row & Elliott, 2009). It is particularly interesting that spiritual perspective was not significantly associated with self-rated health, although similar results were also reported by Dailey and Stewart (2007). The influence of spiritual perspective on self-rated health operates through spiritual well-being, as there was a significant moderate correlation between the spiritual perspective and spiritual well-being, and the latter had a significant correlation with self-rated health. The impact of spiritual well-being on the association between religiosity, spiritual perspective and self-rated health was consistent with previous research, which proposed that religiosity and spirituality influence health outcomes by promoting meaning, purpose, connectedness, hope, and well-being (Koenig, 2008), encouraging transcendence experiences (Nelson, 2009), and imbuing patient contexts with religious meaning and forgiveness (Park, 2012). Future studies are warranted to include the concept of spiritual well-being as a possible



mediator when investigating the influence of religiosity and spirituality on health and well-being.

Although the exact mechanism is not known, the positive association of spiritual well-being and self-rated health in this study might be explained through several mechanisms, including non-physical aspects of well-being (e.g. spiritual and religious aspects) when individuals rate their overall health. Particularly the importance of religious identity in lives of minority groups, and the direct beneficial effects of spiritual well-being on health through promoting healthy behaviors, adaptive coping, and buffering the effects of diseases. McCullough and Laurenceau (2005) argue that considering spiritual and religious aspects of well-being when evaluating overall health may be contribute to experiencing relatively high levels of self-rated health even if individuals experience disease, disability, or negative physiological consequences of aging. It was found that religious affiliation of minority groups may play a crucial role in reporting their health and well-being (Abu-Rayya & Abu-Rayya, 2009; Yehya & Dutta, 2010). Thus, the spiritual and religious lives of minority groups should be taken into account in evaluating their overall health.

### **Limitations of the Study**

Two limitations to this study should be noted. First, although the study sample was large, these findings may not be generalizable to other Jordanian Arab Christians. The participants represented a group who were primarily from the northeastern region of Jordan and were a self-selected convenience sample. Second, this study did not account for participants with acute and chronic illnesses, which may have influenced results, particularly with regard to reporting levels of self-rated health, as relatively high levels of self-rated health were found in this sample. It is recommended that future studies use various measures of health and well-being, including physical, psychological, and social dimensions to examine the holistic relationship of religiosity and spirituality on all dimensions of health and well-being.

### **Implications to Health Care**

Several implications can be drawn from these findings for nurses and other health care personnel, education, and research. Findings indicated that spiritual well-being, spiritual perspective, and religiosity, are important to Jordanian Arab Christians, all of which have potential implications for their health and well-being. Nurses and health care professionals need to be aware of all factors (including spiritual well-being, spiritual perspective, and religiosity) that might influence health and health care. One possible practical implication of these findings is using spiritual and religious dimensions when providing health care to Jordanian Arab Christians. To integrate spirituality into clinical practice, nurses and other healthcare professionals should initially assess the spirituality of individuals to gather data about their religious background and the importance of religious and spiritual beliefs and practices in coping with illnesses. The importance of addressing spirituality in nursing assessment was highlighted in the literature (Chrash, Mulich, & Patton, 2011). Therefore, the findings from this study suggest that health professionals should increase efforts to focus on spirituality and religiosity when considering the holistic nature of the individual or when dealing with overall health and well-being during treatment. Likewise, comprehensive health promotion programs should include aspects of spiritual coping strategies and religious activities in order to achieve higher levels of overall well-being and health through supporting patients' spiritual resources, assisting them in maintaining their spiritual connections, and

promoting further spiritual growth. Further research is needed to explore how to integrate religiosity and spirituality into clinical practice for Arab Christians.

These findings also have potential implications for nursing and other health sciences education at Jordanian universities. The importance and inter-correlations of religiosity, spirituality, and health for individuals' lives can be incorporated into educational curricula and basic training programs. For example, faculties of nursing and other health sciences may use some modified theoretical and clinical courses to include topics about religiosity, spirituality, and health. Through these courses, lectures and assignments can be given to students to facilitate their understanding of these dimensions of spirituality and promote their incorporation into clinical practice. A review of the nursing literature revealed a great need for education in the area of spirituality and spiritual care to improve its integration into clinical practice (Giske & Cone, 2012; Ross, 2006). Furthermore, faculties may encourage seminars and workshops focusing on religiosity, spirituality, and how they influence health and well-being. Future studies are recommended to determine the extent to which the educational curricula of nursing and other health sciences programs in Jordanian universities address religiosity and spirituality as a part of holistic health and care as these findings suggest that religious and spiritual beliefs and practices are used by many Jordanian Arab Christians as mechanisms to achieve better health and well-being.

In conclusion, this is the first study to explore the associations of spiritual well-being, spiritual perspective, and religiosity on health in a community sample of Jordanian Arab Christian adults. The findings revealed that among Jordanian Arab Christians spiritual well-being and religiosity are positively associated with self-rated health, but in the final model only spiritual well-being retains a significant association controlling for the spiritual perspective and religiosity. It demonstrated that participants with greater spiritual well-being were more likely to have better self-rated health and that there was an indirect influence of religiosity and spiritual perspective on self-rated health through spiritual well-being. Given the benefits of spirituality and religiosity to health, nurses and other health professionals can no longer ignore the spiritual dimension of the individual in their care. Moreover, the high mean scores on religiosity and spirituality measures confirm that religiosity and spirituality are ubiquitous among Jordanian Arab Christians and that Christianity is important among its believers.

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