The relationships between religion/spirituality and Mental and Physical Health: A review

Fazilat Pour Ashouri 1, Hosein Hamadiyan 2, Mohammad Nafisi 1, Afshin Parvizpanah 2, Sepehr Raseki 1,*

1 Student Research Committee, Hormozgan University of Medical Sciences, Bandar Abbas, Iran
2 Molecular Medicine Research Center, Hormozgan University of Medical Sciences, Bandar Abbas, Iran

*Corresponding author: Sepehr Raseki, Medical Student of Hormozgan University of Medical Sciences, Bandar Abbas, Iran; Email: flosep538@gmail.com; Tel: +989363945856.

Abstract

Religion and spirituality are usually considered as protective factors against a host of negative health outcomes. Recent surveys have documented several associations between religion/spirituality and physical and mental health outcomes. Most of the evidences on the effects of religion on general health suggest that religion commonly plays a positive role. On the other side, religion and spirituality can also be pathological with harmful effects such as superficially literal, authoritarian or blindly obedient, etc. Various factors with different mechanisms influence this relationship and identification of these moderating and mediating variables is important for further decisions. Therefore, in this review, the relationships between religion/spirituality and mental and physical health are represented.

Keywords: Religion; spirituality; health; review

Introduction

Psychologists have long been interested in the role that religion and spirituality play in the interpretation of and response to life events (1). Religiosity can be thought of as the formal, institutional, and outward expression of the sacred and measured by variables such as belief in God, importance of religion, frequency of religious service attendance, frequency of meditation, and frequency of prayer (2). Spirituality also can be defined as the internal, personal, and emotional expression of the sacred and is assessed by comfort and peace derived from faith, spiritual well-being, spiritual connectedness, spiritual or religious coping and/or spiritual connectedness (3).

Religion and spirituality are usually reported as protective factors against harmful health outcomes. Indeed, individuals with higher levels of religiosity and spirituality and fare better than their less religious or spiritual peers, they have lower rates of high-risk behaviors and fewer psychological health issues and utilize spiritual coping to control physical illness (4).

A large body of surveys have established several associations between religion/spirituality and physical and mental health outcomes. Most studies have evaluated populations directly dealing with their own mortality because of their struggles with health threatening disease, like cardiac disease, different malignancies, AIDS, and renal failure (5). What is spirituality? How does it relate to religion? How has spirituality been researched? What are some of the findings? How may a person’s spiritual needs be assessed? What knowledge, skills and attitudes pertaining to spirituality can be taught? Could they benefit clinicians as well as patients? These are among the questions addressed in this review.

Definitions

Spirituality and religiosity are substantively related to each other, as both are connected to the idea of the sacred; nonetheless, useful distinctions can be drawn (6). Despite definitions vary, spirituality is identified with personal beliefs whereas religiosity is typically aligned with institutionally and traditional
associated behaviors and practices. In the other words, spirituality occurs both within and separate from religious institutions (7).

Religiosity can be defined as the institutional, formal and outward expression of the sacred and examined by variables including belief in God, importance of religion, frequencies of prayer, religious service attendance, and meditation (8). Spirituality can be thought of the personal, internal, and emotional expression of the sacred and is assessed by peace and comfort derived from faith, spiritual well-being, spiritual or religious coping, and spiritual connectedness. Based on the majority of authors, religion is a multifaceted object, incorporating emotional, cognitive, behavioral, and motivational aspects (9). Although all these facets have been measured by different researchers, the topic of which facet most obviously shows the central and crucial nature of religiosity has received little attention by many reviewers (10).

It could be that there is a vital aspect to religion, the examination of which would include the strongest and most accurate results when subjects as the relationships of religion and health are discussed. Therefore, researchers would be well advised to focus on that aspect of religiosity when performing survey (11). In addition, each aspect of religiosity could describe its own unique, but interrelated, construct, with the overall concept of religiosity containing a cluster of somewhat independent factors. If that is the case, then it would be expected that some aspects of religiosity would link with other variables more significantly than others, and some might even represent negative relationships while others illustrate positive associations (12).

Positive and negative aspects of religion

Documents on the effects of religion on general health suggest that religion usually plays a positive role. A positive impact has been reported in research involving participants of all ages, both sex, and a variety of religions including Catholics, Protestants, Jews, Muslims, and Buddhists. Respondents from a number of regions and ethnic groups have been used in a broad range of research designs that evaluated religiosity in different ways (13).

The positive influences of religious and spiritual experience on health are according to the assumption that the experience itself is positive and healthy. Of course, religion and spirituality can also be pathological with harmful effects: superficially literal, authoritarian or blindly obedient, strictly extrinsic, conflict ridden, and self-beneficial (14). In fact, such harmful religion or spirituality can have serious adverse outcomes for both physical and mental health, having been correlated with child abuse and violence, intergroup conflict, and false perceptions of manage, with resulting medical neglect (15). These unhealthy correlations may be most likely when the subject believes that he/she has direct communication with God with little or no social accountability or employs a deferral-to-God solving method (16).

Many studies investigating health and religion, demonstrate a similar protective effect of religion. In a review of 139 research studies using quantified measures of religious commitment, determined that only 39% reported any associations at all, but of these, 72% were positive (17). Measures of the religious variable in such documents composed of social support, prayer, relationship with God, meaning, and participation in religious ceremonies (18). In this regard, lots of researchers reviewed the literature and found positive associations between religion-spirituality and marital satisfaction, well-being, and general psychological functioning. They observed negative relationships with delinquency, suicide, drug, criminal behavior, and alcohol use (19).

Religion has also been linked with some shapes of psychopathology, including authoritarianism, rigidity, dogmatism, suggestibility, and dependence. On the other side, harmful as well as helpful forms of religious coping have been identified, and the harmful forms, such as discontentment or anger with God, clergy, or a congregation, associated with impaired health and poorer resolution of negative life events (20).

As a whole, the literature suggests a general salutary effect of religion on general health, a finding at odds with some previous positions, which held that depression and low self-esteem are not only more likely but perhaps inevitable in religious individuals (21).

Associations of Religiosity and Mental Health

In accordance to the literature, some studies that have measured individual’s psychological status and religion/spirituality have primarily addressed the association between spiritual coping and mental health (22). For instance, subjects used religion as a
coping mechanism for general life concerns or even in the time surrounding their sibling’s death (21). Many works have examined the correlation between domains of religion/spirituality and depressive symptoms. In this regard, majority of researchers found that spirituality, defined as the importance of religion in understanding one’s meaning of life, and the role of religious beliefs in one’s interactions in life, were directly associated with lower levels of depressive symptoms in adolescents (23). Two additional studies on adolescent suicide indicated that intrinsic religiosity and religious influence were correlated with lower risk of suicide (24, 25).

A more recent study revealed that having had positive interpersonal religious experiences and considering oneself as spiritual were both associated with lower levels of depression (26). In particular, interpersonal experience had an essential link with depressive symptoms than did other dimensions of religiousness, while negative interpersonal religious experience was related with greater levels of depression (27).

Such adverse finding is echoed in a recent study, in which greater importance of religion was associated with a greater frequency of depressive symptoms among adolescents. However, due to the cross-sectional design of both of those studies, it is not possible to determine which came first, the negative demand and experiences with religion or the depressive symptoms (28). Of note, most of the results regarding religion/spirituality and depressive symptoms are similar to findings from health risk behavior studies suggesting that social support may be a key mediator (29).

Moreover, researchers speculated that “reinforcing religious and social activities that connect individuals to others” might mitigate negative health behaviors for teenagers (30). In summary, findings examining the relationship between religion/spirituality and mental health have shown that, although certain aspects of religion/spirituality are inversely linked with behaviors such as suicidal ideation, other aspects including negative interpersonal religious experience have been related with greater levels of depressive symptoms, possibly from negative experiences with their congregations (31, 32). In recent studies, the authors have found inverse correlations between domains of religion/spirituality and health risk behaviors, similar to previous findings. For instance, a strong relationship with God, higher levels of spiritual connectedness, and use of spiritual coping were negatively associated with substance use and voluntary sexual activity (33).

The mentioned findings appear to be consistent across ethnic/racial groups including Hispanic, African-American, and Caucasian, and age groups (34). Of note, some few studies found that this association was stronger for girls than for boys. Additional findings from these few studies suggest that social support from religious communities may limit individuals from engaging in high-risk behaviors (35).

Spiritual connectedness and social connections are key factors for reducing risky behaviors. Adolescents with greater levels of spiritual connectedness engage in high-risk behaviors less often, independent of other existing social support. Nevertheless, religious/spiritual social support as a mediating mechanism has not yet been empirically tested in adolescents (36).

Other aspects of religion/spirituality may operate via different pathways than proximal aspects to influence various health outcomes for adolescents, though not enough studies have examined these differential relationships to understand them precisely (37).

**Associations of Religiosity and Physical Health**

A third area of focus has been the role of religion/spirituality in relation to physical health outcomes, specifically for individuals with potentially lifethreatening illness or with chronic conditions requiring strict adherence to medical regimens (38). The very limited documents in this area are primarily descriptive and suggest that hospitalized patients with serious illness may have heightened spiritual concerns in comparison with adolescents with less severe conditions (39). For instance, Silber and Reilly found that seriously ill, African-American, or female adolescents had more spiritual/religious concerns than their counterparts by measuring the spiritual concerns of 114 hospitalized subjects (40).

Spirituality and religiosity may affect physical health by improving health behaviors, providing social resources, or changing psychological responses, especially when dealing with stress (41). In another example, individuals used religion/spirituality to cope with cancer by creating meaning and social support through the crisis of the illness, similar to adults with chronic illness. Spirituality is likely to influence health via psychological processes, such as
decreasing a need for control, altering cognitive appraisals of events, or enhancing a sense of control that may decrease stress, and thus improve health outcomes (42).

It is important to note, however, that not all studies report a statistically significant relationship between spirituality and physical health in adolescents. For example, King et al. did not find an association between religiosity or spirituality and locus of control orientation in a sample of oncology patients (43).

As spirituality and religiosity are hypothesized to decrease stress, they should each lead to reduced cardiovascular and musculoskeletal ailments in the context of extreme stress. However, the evidence is not conclusive (44). Lower levels of religious service attendance have been related to higher rates of death from circulatory disease, however recent work indicates that spirituality and religiosity do not relate to cardiovascular morbidity and mortality. Little work has examined musculoskeletal ailments and religious variables. Links between spirituality, religiosity, and these ailments may be most evident in stressful contexts (45).

In summary, the role of spiritual coping and spiritual concerns among adolescents with physical health conditions has been explored only rarely in a few studies, most of which have shown positive associations (46). The majority of those studies have been descriptive or hypothesis-generating and have found that adolescents with serious chronic illness, similar to adults, have heightened spiritual concerns and engage in spiritual coping strategies to manage their illness.

**Possible Mechanisms of Association**

If religiousness and depressive symptoms are indeed related, what factors influence that relationship? It is challenging to offer a theoretical account that is both elegant and comprehensive because research has yet to confirm which variables moderate the relationship, let alone which variables mediate it (47).

Identification of moderating and mediating variables is important but difficult because both religiousness and depressive symptoms are influenced by a host of biological, social, and psychological factors (48). To complicate matters, the variables with which religion and depression are correlated typically are not exclusively one-way relationships:

Due to the possibility of reciprocal relationships, many factors that are believed to be causes of depression may also be consequences of depression, and the same is true of religiousness. Regardless, insofar as a relationship between religiousness and depressive symptoms does exist, any of a variety of mechanisms might explain the association (49).

Previous research suggests some possibilities that should inform future efforts, although not all of these possibilities can be addressed with meta-analytic methods at present (50).

Religiousness might be associated with depressive symptoms because of similar genetic influences. Several studies suggest that 40%–50% of the variance in religiousness may be attributable to additive genetic factors (51). To the extent that certain genes that confer resistance to depressive symptoms also contribute to the development of religious sentiments, one might expect a negative correlation between religious involvement and depressive symptoms. However, the multivariate behavior–genetic studies that would shed light on this issue have not been conducted to date (52).

Insofar as religious involvement is inversely related to depressive symptoms, it is conceivable that this association applies equally to persons irrespective of the amount of life stress that they experience. This hypothesis has been called the main effect hypothesis, signifying that the association of religiousness and depressive symptoms is significant and negative when averaged across all levels of life stress (53). On the other hand, it is conceivable that, like many psychosocial factors that are related to depressive symptoms, the negative association of religious involvement and depression is even stronger for people who have recently undergone high amounts of life stress. This view has been called the buffering hypothesis (54).

The main effect hypothesis and buffering hypothesis are not mutually exclusive, of course: It is possible for religious involvement to be related to significantly lower degrees of depressive symptoms for all persons and for the association to become even stronger for people who are undergoing particularly high levels of life stress (55). Indeed, some investigators have found evidence for both hypotheses. Relatedly, it is conceivable that the negative association between religious involvement and depressive symptoms becomes particularly strong among people who are undergoing moderate or severe depressive difficulties. Depressive symptoms themselves can be a substantial source of life stress that may require secondary coping efforts for the individual to avoid being caught in a downward spiral (56).
study of religion and mental health would benefit greatly from knowing whether the religious involvement–depressive symptoms relationship is consistent with the main effect hypothesis, the buffering hypothesis, or both (57). Given the importance of stress to theorized mechanisms, we examined ailments likely to be linked to the experience of stress. Extreme stress can trigger a neurohormonal cascade of events that may support coping in the short run, but can threaten health if it does not abate (58). This stress can impair immune function, leading to higher incidence of infection. To the extent that spirituality and religiosity decrease stress, they should predict lower rates of infectious ailments after a stressful event. Consistent with this, religious service attendance is associated with enhanced immune function (59). In addition, persistent exposure to cortisol and other stress hormones may lead to negative effects on bone density, can increase blood pressure, promote atherosclerotic changes in arteries, and increase the risk of myocardial infarction. Musculoskeletal ailments have also been associated with another form of allostatic load (hypothalamic–pituitary–adrenal or HPA axis hyporesponsiveness), wherein low cortisol responses to stress allow increased secretion of inflammatory cytokines that promote autoimmune and other inflammatory diseases, many of which can affect the musculoskeletal system. Based on these physiologic mechanisms, any factors that reduce stress should reduce cardiovascular and musculoskeletal ailments (60).

Given reports of differences in the rates of religiousness and depression across sociodemographic groups, it is conceivable that the religiousness–depression association is not uniform across ethnicity, age, and gender. If so, the apparent disparities among some of the results that investigators have obtained may be caused by differences in the nature of the samples studied (61). For example, the religiousness–depressive relationship may be stronger for women than for men, for older adults than for younger adults, or for African Americans than for European Americans (62). Relatadly, it is likely that the methods used to measure religiousness and/or depression within these studies have a reliable impact on the strength of the associations. In a recent narrative review, authors noted that the negative association of religiousness and depressive symptoms appeared to be particularly strong when religiousness was measured in terms of public religious involvement or intrinsic religious motivation but less so when religiousness was measured in terms of private religiousness, such as the strength with which people hold particular religious beliefs (63).

Moreover, some authors also noted that manifestations of religiousness that are extrinsically motivated, perhaps as a means to nonreligious ends, may actually be associated with a higher risk for depressive symptoms. The postulate that extrinsic religiousness is a maladaptive form of religiousness, predictive of negative outcomes such as mental illness as opposed to mental health, has been supported by others (64).

**Conclusion**

Ultimately, this will provide more specific information on the actual function of religion/spirituality for the individuals that can be used to develop and evaluate targeted intervention efforts. It is hoped that with the development of more sophisticated measures and study design, researchers will be able to better understand how religion/spirituality operates to impact health and well-being and incorporate those critical elements into interventions.

**Acknowledgements**

The authors would like to thank the Student Research Committee of Hormozgan University of Medical Sciences for their help and support.

**Conflict of Interest**

The authors declare that they have no conflict of interests.

**References**

22. Ashouri FP, Rasekh S. Correlation between Religious Beliefs with Mental Health and Academic Performance in Medical Students.
36. Brewer-Smyth K, Koenig HG. Could spirituality and religion promote stress resilience in survivors of