Chapter 18
Spiritual Resilience and Struggle Following the Experience of a Stroke

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Historically, researchers and practitioners in psychology and healthcare have tried to distance themselves from religion and spirituality. Though figures like S. Weir Mitchell and William James saw spirituality as compatible with healthcare and psychology, the dominant figures of behaviorism and psychoanalysis—B.F. Skinner and Sigmund Freud—both rejected religion as an illusion that humanity would outgrow as it progressed. Empirical research, however, has shown that religion and spirituality often provide people with vital resources to facilitate resilience in the face of major traumas, including illness. Empirical research also indicates that trauma can shake and even shatter people spiritually. Spiritual struggles are not uncommon and have been tied to declines in physical and mental health, though they have also been linked to reports of growth.

This chapter explores the double-edged character of spirituality—its capacity to sustain people in their most difficult times, and its ability to provoke profound struggle and strain about matters of deepest importance to people. We will review the theory and research that speak to these points and bring material to life with references to qualitative studies of one particular group of people, those who have experienced a stroke and their caregivers. Because strokes raise fundamental issues of finitude, loss of control, and suffering, the experience of stroke may be an important context for studying religion and spirituality as both a source of resilience and struggle.

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18.1 Effects of Stroke on Well-Being

It is estimated that 2.6–2.7 % of adults living in the United States have experienced a stroke (Centers of Disease Control and Prevention, 2012). In addition to the physical limitations and neurological deficits that result from stroke, stroke can have detrimental effects on other aspects of functioning and well-being among stroke survivors and their families. Systematic reviews and meta-analyses have found that a substantial subset (20–30 %) of survivors of stroke report clinically significant anxiety or depressive symptoms across time-points—from just after stroke to several months later (Burton, Murray, Holmes, Astin, Greenwood, & Knapp, 2012; Hackett, Yapa, Parag, & Anderson, 2005). Social and job functioning are also significantly diminished (e.g., Teoh, Sims, & Milgrom, 2009), even among those without severe physical limitations (Hommel, Trabucco-Miguel, Joray, Naegele, Gonnet, & Jaillard, 2009). The evidence suggests that individuals with spinal cord injury, traumatic brain injury, and other medical illnesses share similar challenges, including poor life satisfaction (Dijkers, 1997), increased distress (De Carvalho, Andrade, Tavares, & de Freitas, 1998), and elevated depression (Katon, 2003).

The impact of stroke on primary caregivers—often a spouse—is significant as well. Evidence indicates that many stroke caregivers experience diminished life satisfaction, emotional health, social functioning, and quality of family relationships as a result of their responsibilities as caregiver (Gaugler, 2010; Godwin, Ostwald, Cron, & Wasserman, 2013; Ostwald, 2008; Ostwald, Bernal, Cron, & Godwin, 2009; Ostwald, Godwin, & Cron, 2009). Similar to caregivers for stroke, caregivers for a range of other medical issues share similar challenges, including elevated distress and decreased well-being (see meta-analysis by Pinquart & Sorensen, 2003).

While there now exists a substantial literature on the social, psychological, and physical well-being of stroke survivors and their caregivers, the literature addressing spirituality and religion in stroke populations is relatively sparse. Five quantitative studies have examined this topic specifically (Berges, Kuo, Markides, & Ottenbacher, 2007; Giaquinto, Sarno, Dall-Armi, & Spiridigliozzi, 2010; Johnstone, Franklin, Yoon, Burris, & Shigaki, 2008; Skolarus, Lisabeth, Sanchez, Smith, Garcia et al., 2010; Teel, Duncan, & Lai, 2001). Here we will review recent literature on spirituality and religion in medical populations, highlighting literature specific to rehabilitation and stroke populations. We will also discuss the implications of this literature. We begin by offering some background on religion and spirituality that will provide a theoretical framework to organize our review of the literature and subsequent discussion of its implications.

18.2 Characterizing Religion and Spirituality

Much research on religion and spirituality presupposes that these constructs are traits that are stable over time and not appreciably influenced by circumstance. There is evidence, however, that religion, spirituality, and related variables may change over time and shift in response to changing stressors and contexts. For this

reason it is useful to understand religion or spirituality as a process, a *search*. Pargament has defined religion as "the search for significance in ways related to the sacred" (Pargament, 1997). The word "search" emphasizes that finding and developing a relationship with something significant is not a time-limited event, but, rather, is something people continually strive towards over the course of their lives. Elaborating on the concept of "search", Pargament uses the terms "pathways" and "destinations" to describe the various routes people may take toward ultimate significant goals or ends in living. The term "sacred" refers both to traditional notions of God and divinity as well as to other aspects of life that are imbued with sacred qualities (Pargament, 2007). Sacred qualities include: *boundlessness,* lacking the limits which characterize ordinary reality; *ultimacy*, containing the elemental truths of existence; and *transcendence*, beyond mundane concerns (Pargament, 2007). The search for significance becomes religious in nature, according to Pargament, when the sacred is part of the pathways toward or destinations of significance. For example, when one prays for health, the goal or destination of health is not necessarily sacred, but the action or pathway—prayer—is sacred in character, making prayer for health a religious activity. As another example, abstaining from alcohol may become religious: even though the action or means—abstinence from alcohol—may be considered ordinary, it can become religious if one does so in order to comply with a religiously-based moral code.

It should be noted that the understanding of the religious and spiritual articulated here does not presuppose that religion and spirituality are necessarily good, and leaves room for the possibility that religion and spirituality may be associated with outcomes or behaviors considered harmful or undesirable. As we will see, studies on religion and spirituality in medical populations suggest that religion and spirituality can have both beneficial and harmful effects on health-related variables for both patients and their care-givers.

18.3 Functions of Religion and Spirituality in Times of Crisis

Why might individuals turn to religion and spirituality after stroke? Pargament (1997) argues that individuals turn to religion and spirituality in times of stress in order to serve key functions, which may be summarized with the following labels—meaning, control, closeness to God, closeness to others, and life transformation (Pargament, Koenig, & Perez, 2000). In this section, we draw on qualitative data from stroke populations to explain and illustrate these functions, paying attention to both positively and negatively-valenced ways that individuals may engage with religion or spirituality after the experience of stroke.

Two important functions religion may serve in times of crisis are that of providing *meaning* and a sense of *control*: religion offers ways to preserve crucial global beliefs regarding the benevolence of the world and its predictability in circumstances that threaten these beliefs (Park, 2012). To illustrate, in a qualitative study of stroke survivors, several participants reported reminding themselves of God's plan for them. In the words of one survivor, "when God closes one door, he opens

another," (Bays, 2001, p. 23). Another participant described holding onto a benevolent world view by focusing on God's involvement in his/her life and recovery: "I think that God wants me to get well and that He has put in my world the things to aid me to get well," (Bays, 2001, p. 23). Similarly, in a qualitative study of caregivers of stroke survivors, a caregiver assured herself, "God does not give you more than you can handle," thus reassuring herself that she can manage her stressors and that God is still in control (Pierce, 2001, p. 348).

Stroke survivors may also engage negatively with religion towards these same ends of finding meaning and/or maintaining a sense of control (Pargament et al., 2000). In a qualitative study of prayer after stroke, some survivors reported asking God in prayer why the stroke had happened, and one reported worrying that God was punishing her (Robinson-Smith, 2002). We may speculate that interpreting illness as punishment allowed this individual to preserve her sense of the world as comprehensible and just, while sacrificing a belief in her own status as a basically good and virtuous person. In other cases, individuals may choose to blame God rather than themselves, an interpretation which challenges God's benevolence in order to preserve a sense of personal value and integrity. As a stroke survivor from Hong Kong told authors of a qualitative study, "I did everything right but I wondered why God tortured me," (p. 318, Chow & Nelson-Becker, 2010).

Another key function religion may serve after stroke or other crises is that of providing *closeness to God* and *closeness to other people*. A qualitative study of prayer after stroke identified "connecting to God" as a major theme in participants' interviews. One survivor reminded herself, "God has always been with us" (Robinson-Smith, 2002, p. 359). A Chinese Buddhist stroke survivor described her experience of praying to the Bodhisattva Kwan Yin, saying, "It is as if I am revealing my deepest concerns to the High Power who is in control and I feel comfort in return" (Chow & Nelson-Becker, 2010, p. 320). Regarding closeness to others, numerous studies support associations between religious involvement and increased social support (Cummings & Pargament, 2010). Similarly, studies suggest stroke patients and caregivers cope by drawing on spiritually—or religiously-based social support—for instance, attending religious services, asking for others' prayers and support, offering prayers to others (e.g., Pierce, Steiner, Havens, & Tormeohlen, 2008), and seeking counsel from clergy (Price, Kinghorn, Patrick, & Cardell, 2012).

Just as with the functions of meaning and control, we can speculate that stroke survivors may seek closeness in negatively valenced ways as well. For instance, survivors may complain to God (e.g., Chow & Nelson-Becker, 2010) or express anger towards one's spiritual community or spiritual leaders as a way of maintaining communication at a time when disengaging from religion may be a compelling alternative.

A final function of religion is that of *life transformation* (Pargament, 1997). After stroke or other medical crises, individuals may find themselves drawn to a deeper religious faith or a new faith tradition as they let go of goals that illness may have taken from them and refocus on new goals consistent with their new circumstances and limitations. For instance, in a qualitative study of Malaysian Muslim women with breast cancer, one woman described at first experiencing despair after her

diagnosis of terminal cancer. She found new drive and purpose when she turned to her faith and interpreted her illness as an opportunity to direct her energy towards growing closer to Allah and preparing her soul for death and the afterlife (Ahmad, Muhammad, & Abdullah, 2011). In other cases, individuals may go through a period of spiritual struggle before reengaging with religion in a positive manner. Here a stroke survivor describes how he questioned God for a time before recovering his faith: "Did God inflict this stroke on me? Is that the kind of God there is? And then I said to myself, but still there is beauty. And the fact that there's beauty says I think God is loving and wants to give us pleasure" (Price, Kinghorn, Patrick, & Cardell, 2012, p. 114). This stroke survivor subsequently took up photography, focusing in particular on beauty in nature, which for him represented God's loving presence in the world.

While these individuals and many others may harness religion to transform their lives in positive ways, it's important to note that struggles with religion and spirituality are not always resolved so neatly (e.g., Pargament, Koenig, Tarakeshwar, & Hahn, 2004). Some may continue to struggle, and, as religion becomes a source of persistent distress, a portion of those who are struggling may choose to turn away from religion altogether. As an example, a year after her stroke, one survivor who reported initially praying to cope stated, "I can't pray now; it is giving me no confidence at all" (Robinson-Smith, 2002, p. 359).

In summary, qualitative studies suggest that engagement in religion and spirituality after stroke may be analyzed with the same theoretical framework used to conceptualize engagement of religion and spirituality after other kinds of crises. And, further, qualitative data suggest that this engagement may take on a positive or negative valence which, depending on the circumstances, may be associated with resilience or distress after stroke. Below we examine empirical data regarding patterns in religious coping after stroke and other medical crises, and the degree to which religion/spirituality may be a source of resilience or struggle in individuals coping with their own stroke or that of a loved one.

18.4 Religion and Spirituality as a Source of Resilience

Quantitative studies have documented that religion and spirituality are modestly associated with better adjustment in stroke populations. Two studies of Mexican-American stroke survivors highlight religion as a possible source of resilience. A cross-sectional study comparing Mexican-American stroke survivors to non-Hispanic white stroke survivors found that the Mexican-American survivors scored higher on a measure of non-organizational religious and spiritual belief (Skolarus et al., 2010). The authors suggest that this difference in religion/spirituality may account for higher survival rates among Mexican-American stroke survivors relative to non-Hispanic white stroke survivors. In another study examining spiritual engagement as a possible explanation for improved survival, more frequent church attendance prior to stroke longitudinally predicted better post-stroke outcomes among older Mexican Americans (Berges et al., 2007). Specifically, among those

who attended church more frequently prior to stroke, physical functioning deteriorated less, relative to those who had been attending church less frequently. These beneficial effects of church attendance held even after adjusting for demographic variables and comorbid chronic conditions.

Studies do not always support a robust association between religious engagement and resilience however. Sometimes differing findings are present in the same study, suggesting that it is an oversimplification to conclude that any kind of increased religious engagement confers benefit. For instance, in one study of cross-sectional relationships between health status (as indexed by SF-36 scores) and measures of religion and spirituality in stroke survivors, only religious and spiritual coping were significantly positively related to the mental health subscale of the SF-36, while other aspects of religion/spirituality (daily spiritual experiences, belief in God, religious and spiritual coping, private religious practice, participation in organized religious practice, and religious social support) were not significantly associated with mental health (Johnstone et al., 2008).

The equivocal findings in this study reflect the conclusions of systematic reviews of religion and spirituality in medical populations generally. In a review of well-designed studies of physical health outcomes associated with religion and spirituality, Powell, Shahabi and Thoresen (2003) concluded that the literature failed to support hypotheses that religion or spirituality would slow the progression of cancer or hasten rehabilitation from illness, as measured by physiological indicators. A systematic review of associations between religion/spirituality and physical and mental well-being among breast cancer survivors also concluded that evidence was limited for positive effects in this population (Schreiber & Brockopp, 2012).

What might account for these inconsistent findings? There are a number of possibilities. In the following section we explore some important considerations that may help explain equivocal findings.

18.4.1 The Stress Mobilization Effect and Cross-Sectional Design

One possible explanation has to do with problems inherent in cross-sectional design: religious coping may often be associated with poorer health and mental health cross-sectionally, not because religion and spirituality are detrimental, but because greater stress mobilizes higher levels of religious coping (along with other kinds of coping). This has been termed the "stress mobilization effect" (Pargament, 1997). One recent study illustrates nicely how the stress mobilization effect can cloud the beneficial impact of positive religious coping when associations are examined cross-sectionally rather than longitudinally (Paiva et al., 2013). In this study, researchers measured religious practices in a sample of 23 cancer patients about to begin chemotherapy and then examined health outcomes among these patients at later time-points. Cross-sectional data showed that religious practices were associated with poorer outcomes, but longitudinally, religious practices were found to

have a buffering effect on declines in health related to chemotherapy: after four cycles of chemotherapy, patients with low scores on a measure of religious practice prior to chemotherapy experienced significant worsening of fatigue and nausea, while patients with higher scores on a measure of religious practice did not experience this worsening in symptoms (Paiva et al., 2013).

But stress mobilization does not tell the whole story: it is not only in cross-sectional studies that data are equivocal regarding the benefit conferred by religion and spirituality in stroke and other medical populations. For instance, a study of a largely Catholic sample of Italian stroke patients found that religious and spiritual belief were not significantly correlated with changes in anxiety and depressive symptoms or with changes in functional independence, suggesting that religious and spiritual belief did not affect stroke recovery in this sample (Giaquinto et al., 2010). Likewise, in a longitudinal study of primary care-givers for stroke patients, researchers found only marginally significant associations between spirituality (as indexed by a measure of centrality of spiritual beliefs to one's life) and physical health problems (Teel et al., 2001). By comparison, other predictors (including fatigue, sorrow, stress, depressive symptoms, financial problems, scheduling problems, family conflict, vigor, and esteem in care-giving role) prospectively predicted physical health. Similarly, equivocal longitudinal findings have been obtained in studies of other medical populations (e.g., Ai, Wink, & Shearer, 2011; Hills, Paice, Cameron, & Shott, 2005; Park, Malone, Suresh, Bliss, & Rosen, 2008; Perez et al., 2009). These findings suggest there may be other important considerations at work besides stress mobilization and cross-sectional design.

18.4.2 Reflections of Personal Characteristics in Religious and Spiritual Behaviors

Another possible explanation for equivocal findings is that various indices of religion and spirituality reflect somewhat different general underlying personal characteristics, tendencies, or coping strategies, which themselves are differentially associated with benefit (Cummings & Pargament, 2010). Bonaguidi, Michelassi, Filipponi, and Rovai (2010) articulated this possibility in explaining equivocal results regarding the utility of religion in improving survival rates among liver transplant patients. Authors pointed out that the religious coping strategies not found to predict survival rates—that is, waiting for God's help and reminding oneself of God's plan—appear to reflect a more passive approach to coping, while the religious coping strategy that did significantly predict reduced mortality—labeled "seeking God"—may reflect a generally more active and adaptive approach to recovery from surgery.

Just as Bonaguidi and colleagues (2010) suggest that different kinds of religious engagement may differentially reflect active or passive forms of coping, other researchers (Ai et al., 2010, 2011) highlight an underlying tendency toward negative emotionality as a possible explanation of conflicting findings in their studies of heart

surgery patients. In one of these studies (Ai et al., 2010), pre-operative prayer coping was found to robustly predict lower levels of depression 30 months post-surgery, while religious reverence—that is, reported experience of feelings of reverence in religious contexts (e.g., in church, while reading the Bible)—actually predicted *higher* levels of depression longitudinally, even after controlling for demographic and relevant psychosocial variables. To explain these differences in their results, the authors suggest that patients endorsing greater religious reverence may display greater emotionality in other settings, a characteristic which may make a person more vulnerable to depression after negative life events. Another study in this population (Ai et al., 2011) found that reverence in *secular* settings (e.g., when in nature, sight-seeing, or serving others) predicted shorter hospital stay, while religious reverence did not. These results led the authors to highlight that religious reverence may entail negatively-valenced emotions like fear or awe (Otto, 1928) more so that reverence experienced in non-religious settings, such that religious reverence may be a marker for a tendency towards negative emotionality in a way that secular reverence is not (Ai et al., 2011; Ai, Wink, Tice, Bolling, & Shearer, 2009).

18.4.3 Interactions Between Personal and Situational Characteristics

A third explanation for differing or equivocal findings is that personal and situational characteristics may interact to determine whether a particular form of religious or spiritual involvement confers benefit. A recent longitudinal study on depression in heart failure patients found that no religious or spiritual variables measured (organized religious commitment, private religious practice, religious social support, daily spiritual experience, religious coping) were significantly associated with depression until Health Locus of Control (HLOC) was included in the model (Park, Sacco, & Edmondson, 2012). The authors had hypothesized that patients with lower perceived internal control over their health would be more likely to experience religiousness and spirituality as protective against depression. Results partially supported this hypothesis, but differed depending on the measure of religiousness or spirituality used. Daily spiritual experiences predicted less depression for those with *low* internal HLOC, as hypothesized, while organized religiousness predicted less depression for those with *high* internal HLOC. To explain these contrasting results, the authors point out that organized religiousness may reflect a more active coping style consistent with a higher internal locus of control, while spiritual experience may represent a more passive and emotional coping style consistent with a lower internal locus of control. This study illustrates how complex the picture can become when we simultaneously examine situational characteristics (e.g., the degree to which personal control can influence outcomes), health-specific attitudes (e.g., HLOC), and the general tendencies reflected in a particular religious or spiritual coping strategy or behavior (e.g., active vs. passive; tendency toward negative emotionality).

18.4.4 Summary

In summary, we have inconsistent evidence that greater religious or spiritual engagement (prior to or in response to medical crisis) contributes to better adjustment in stroke and other medical populations. Also, while researchers are beginning to examine the factors that determine when and for whom religion may be an important source of resilience, clear and replicable patterns are lacking at the current time. This ambiguity with regard to religion and spirituality as sources of resilience stand in contrast with the robust findings on associations between maladjustment and negatively valenced spiritual engagement, which is the subject of the next section.

18.5 Religion and Spirituality as Sources of Struggle

We now transition from a discussion of religion and spirituality as resilience to a discussion of religion and spirituality as sources of struggle after stroke. While quantitative studies of stroke populations have yet to address this topic, two studies of heterogeneous rehabilitation populations suggest that individuals in these populations can be significantly negatively affected by religion and spirituality. One cross-sectional study in a sample of rehabilitation patients (27 % stroke patients) found that negative spiritual experience correlated significantly and negatively with general health and mental health, though these relationships became non-significant after controlling for demographic variables (Johnstone & Yoon, 2009). A four-month longitudinal study of rehabilitation patients (17 % stroke patients) found more robust associations with maladjustment (Fitchett, Rybarczyk, DeMarco, & Nicholas, 1999). In this study, negative religious coping was found to predict higher depression, lower life satisfaction, and lower scores on a measure of activities of daily living, and these associations remained significant even after adjusting for demographic and health-related and mental-health-related covariates at pre-admission.

As with research on religion as a source of resilience, these findings regarding rehabilitation populations are reflected in the broader literature on religion and spirituality in medical populations. A systematic review concluded that existing literature provides adequate support for the hypothesis that religion and spirituality can have detrimental health effects in medical populations (Powell et al., 2003). Summarizing research on negative religious coping, or spiritual struggle, Abu Raiya, Pargament and Magyar-Russell (2010) concluded that "[t]he weight of the evidence is clear… certain forms of religion can pose a significant risk to health and well-being" (Abu Raiya et al., 2010, p. 402). Further, the literature suggests that this pattern generalizes across religious traditions, including Judaism (Dubow, Pargament, Boxer, & Tarakeshwar, 1999), Hinduism (Tarakeshwar, Pargament, & Mahoney, 2003), and Islam (Abu Raiya, Pargament, Mahoney, & Stein, 2008).

Not all studies of spiritual struggle have found robust effects, however. For instance, in a careful study of patients with HIV/AIDS, inclusion of negative and

positive religious coping in the model led to significant but small increases in predicted variance in quality of life (overall and HIV mastery), depression, spiritual well-being, and CD4 count (a biomedical indicator that diminishes as HIV/AIDS progresses), over and above variance predicted in these five outcome variables by demographic and psychosocial measures at baseline (Trevino, Archambault, Schuster, Richardson, & Moye, 2012). The change in R squared was only about 0.01 for each of the outcome variables, and, with the exception of spiritual well-being, it was negative religious coping which carried the significant beta weight, rather than positive religious coping. Beta weights were in the expected direction—that is, greater spiritual struggle was associated with higher levels of depression and diminished overall functioning, HIV mastery and CD4 count.

It is not always clear why spirituality is more detrimental in some instances and less so in others, but there are few studies that have begun to examine important moderators of the negative effects of spirituality in medical populations. We review three potentially important moderators here: the valence of the religious or spiritual engagement being measured, the degree to which an individual is religiously committed, and the chronicity of religious and spiritual problems.

18.5.1 Valence of Religiousness and Spirituality

One moderator we mentioned above is the valence of religious or spiritual engagement being measured. Most studies of religion as a source of problems use a negatively-valenced indicator of religiosity or spirituality, such as negative religious coping (also termed spiritual struggle), punishing God image (Ironson et al., 2011) or past negative religious experience (Johnson et al., 2011). This general pattern of course begs the question, what leads to negatively-valenced engagement with religion or spirituality rather than positive engagement? This question is outside the scope of this paper, but initial findings suggest negative engagement in other areas of life (specifically, dispositional neuroticism and more negative situational appraisals) may be an important predictor of spiritual struggles (Ano & Pargament, 2012).

Note that there are some important exceptions to these general patterns that negatively-valenced religion/spirituality predicts maladjustment and positively valenced religion/spirituality predicts benefit. Serving as exceptions to the former pattern, negative religious coping has been found to predict stress-related growth in a number of samples, including military veteran cancer survivors (Trevino et al., 2012) and elderly hospital patients (Pargament et al., 2000). And, serving as exceptions to the latter pattern, some studies have found that positively-valenced measures can predict undesirable outcomes. For example, in a longitudinal study of patients presenting with a first myocardial infarction, both positive and negative religious coping predicted higher levels of depression 1 month later, even after controlling for demographic variables, social support and baseline depression symptoms (Park & Dornelas, 2011).

Another important study showing undesirable effects for positive religious coping suggests that positive religious coping can be tied to active use of medical care to an extent that may be maladaptive (Phelps et al., 2009). In this study, 664 advanced cancer patients were given baseline measures and then followed until the time of data analyses, by which time 345 patients with adequate data had died. Patients were then divided into groups of high and low positive religious copers, based on whether they scored above or below the median on the positive religious coping scale at baseline. After controlling for demographics, a high level of positive religious coping at baseline was found to be associated with greater receipt of mechanical ventilation (11.3 % vs 3.6 %, AOR = 2.81) and intensive life-prolonging care (13.6 % vs. 4.2 %, AOR = 2.90) in the last week of life. The relationship between high positive religious coping and intensive life-prolonging care was still significant after controlling for other coping methods, terminal illness acknowledgment, support of spiritual needs, preference for heroics, and completion of advanced directives. In addition to highlighting how positively-valenced spirituality can have undesirable effects, this study also demonstrates how characteristics of the circumstances and the stressor may help determine whether particular kind of religious behavior is adaptive or maladaptive.

18.5.2 Religious Commitment

A second potentially important moderator of negative effects of religion is the degree to which an individual is devout or religiously committed. It makes intuitive sense that one must have, in the past or present, placed a certain amount of importance on religion or spirituality in order to develop a religious or spiritual struggle. This led researchers to hypothesize that spiritual struggle should be more common among those who are religious or spiritual (e.g., Exline, Yali, & Lobel, 1999), but, interestingly, some studies have found just the opposite: that less religiousness is associated with greater struggle (Exline, Park, Smyth, & Carey, 2011; Exline, Yali, & Sanderson, 2000). Perhaps more intuitively, some studies have found that struggle is more detrimental among the devout, even if it is less prevalent in this group. For example, in a longitudinal study of heart failure patients, religious struggle was found to predict greater depression three months later, as well as longer hospital stays, and effects were found to be stronger for more religious patients (Park, Wortmann, & Edmondson, 2011).

A study by Kristeller, Sheets, Johnson, and Frank (2011) provides further evidence for the relevance of struggle to the religiously devoted. In a cluster analysis of 114 cancer patients at a Midwestern oncology practice, 14 % of the sample was found to fall into a cluster characterized by high negative religious coping scores along with high levels of private religious practice, frequent spiritual experiences, and high positive religious coping scores. This group experienced higher depression than any of the other three clusters identified.

18.5.3 Chronicity of Religious and Spiritual Problems

A third potentially important moderator of the negative effects of spiritual struggle is chronicity. In a longitudinal sample of medically ill elderly patients, endorsement of struggle was found to robustly predict worse adjustment, in particular when it was chronic—that is, when individuals endorsed struggle at both baseline and follow-up 2 years later (Pargament et al., 2004). In contrast, endorsement of struggle at only one of these time points was not a robust predictor of adjustment in this sample. Further qualitative and quantitative research may help us understand how and why some stroke patients and other patients are able to adaptively resolve or manage religious and spiritual struggles, while others are not able to do so. This research may also inform efforts to effectively address or intervene on spiritual struggle and other spiritual and religious problems in these populations before these problems become chronic.

18.6 Intervention Studies

The evidence reviewed above indicates that spirituality and religion can have important health consequences in medical populations and suggests that it may benefit patients to specifically address religious and spiritual concerns in medical contexts. Research on patient preferences and perceptions of medical care support the utility and appropriateness of dealing with religious and spiritual concerns in medical contexts. Studies have shown that patient populations report significant spiritual needs (e.g., Balboni et al., 2007; Fitchett, 1999; Lui & MacKenzie, 1999; Williams, Meltzer, Arora, Chung, & Curlin, 2011), that many patients want healthcare providers to talk with them about religion and spirituality (Cotton et al., 2012; Williams et al., 2011), and that patients (Williams et al., 2011) and families (Ando et al., 2010) value attention to spirituality and religion in medical care.

In light of these studies on patient preferences, intervention studies have begun to examine ways to apply the above research findings on health consequences in medical populations. The authors were able to identify six such studies, which together suggest that paying particular attention to spiritual and religions concerns may yield modest benefits for patients. Cole and Pargament (1999) developed a spiritually integrated intervention for individuals with cancer, which explored the themes of control, identity, meaning and relationship, paying particular attention to spiritual resources and spiritual problems related to these themes. A pilot study found that participants in the intervention group experienced stable depression and pain severity from pre- to post-test, while the no-treatment group experienced worsening of these symptoms (Cole, 2005). Tarakeshwar, Pearce, and Sikkema (2005) developed and piloted a spiritual intervention for adults with HIV/AIDS, providing instruction and support in engaging in positive spiritual coping strategies and managing spiritual struggles. Intervention participants (n = 13) demonstrated significant increases in self-rated religiosity and use of positive spiritual coping from pre- to post-test, as well as significant decreases in depressive symptoms and negative spiritual coping.

Randomized controlled trials have also been conducted to address the incremental benefit of attending to the spiritual, as compared to secular interventions. Dramatic results favoring a spiritual over a secular intervention were found in a randomized controlled trial comparing effects of spiritual and secular mantra meditation among migraine sufferers. Spiritual meditation yielded significantly greater benefits relative to secular meditation regarding spiritual experiences, pain tolerance, headache frequency, and mental health (Wachholtz & Pargament, 2008). Another RCT similarly found significant benefit for a spiritual intervention relative to a control group who received no intervention (Kristeller, Rhodes, Cripe, & Sheets, 2005). This study examined whether brief conversations about spirituality and religion with an oncologist made a difference in the well-being of cancer patients. Follow-up measures administered 3 weeks later showed that those in the intervention group experienced greater improvements with respect to depression and quality of life relative to the control group.

Other randomized controlled trials have found only modestly improved outcomes for a spiritual intervention relative to a similar secular intervention. In one such study, McCauley, Haaz, Tarpley, Koenig, and Bartlett (2011) randomly assigned chronically ill adults to a spiritual intervention and a secular intervention. In the spiritual intervention, participants watched a video showing how patients of diverse spiritual backgrounds harnessed their spirituality to cope with illness. They were also given an accompanying workbook to complete. In the secular intervention, participants watched an educational video on cardiac risk factors developed by the National Heart Counsel and were also given an accompanying workbook focused on learning to adapt and cope with their illness. Results showed that the secular and spiritual interventions were equivalent in their effectiveness on all measures of adjustment except energy level: those randomized to the spiritual intervention experienced increases in energy over the course of treatment, while those in the secular intervention experienced decreases (McCauley et al., 2011). A similar study among low-income cancer patients likewise found only modest differences between spiritual and secular treatments (Moadel et al., 2012).

These intervention studies represent promising initial efforts to apply findings of the growing body of research reviewed here on associations between religion, spirituality and well-being in medical populations. Taken together it appears that specifically attending to the religious and spiritual can be beneficial for patients, at times more so than comparable secular interventions. Further research is needed regarding when and how religious and spiritual concerns can be usefully addressed when working with medical populations.

18.7 Conclusions

The descriptive studies reviewed in this chapter indicate that spiritual and religious concerns can have important health consequences in medical populations, and findings of existing intervention studies support the potential benefit of specifically attending

to religious and spiritual concerns in medical contexts. Providers for stroke and other medical populations can begin incorporating the existing research findings into their practice by encouraging survivors and families to access religious and spiritual resources. Accessing spiritual and religious resources could involve conversations with the hospital chaplain, reconnecting with religious or spiritual communities post-stroke, or engagement in meaningful private religious practices, such as prayer or reading religious/spiritual literature. Practitioners working with stroke patients and caregivers should also be attentive to the possibility of spiritual struggle in this population and may assist patients and caregivers with struggles by normalizing them and encouraging further conversation. Likewise, religious organizations should be aware of the spiritual needs of stroke patients and may consider developing strategies to identify and support stroke survivors and their families who have spiritual and religious concerns.

We await continued research on religion and spirituality in stroke and other medical populations that can help us understand when and how spirituality and religion may be helpful or harmful, how to effectively and sensitively guide patients in drawing on spiritual and religious resources, and how to mitigate the negative consequences that spirituality may precipitate in patients and their caregivers.

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