

# Research on Religion, Spirituality, and Mental Health: A Review

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Religious and spiritual factors are increasingly being examined in psychiatric research. Religious beliefs and practices have long been linked to hysteria, neurosis, and psychotic delusions. However, recent studies have identified another side of religion that may serve as a psychological and social resource for coping with stress. After defining the terms religion and spirituality, this paper reviews research on the relation between religion and (or) spirituality, and mental health, focusing on depression, suicide, anxiety, psychosis, and substance abuse. The results of an earlier systematic review are discussed, and more recent studies in the United States, Canada, Europe, and other countries are described. While religious beliefs and practices can represent powerful sources of comfort, hope, and meaning, they are often intricately entangled with neurotic and psychotic disorders, sometimes making it difficult to determine whether they are a resource or a liability. *Can J Psychiatry*. 2009;54(5):283–291.

## Clinical Implications

- Religious beliefs and practices may be important resources for coping with illness.
- Religious beliefs may contribute to mental pathology in some cases.
- Psychiatrists should be aware of patients' religious and spiritual beliefs and seek to understand what function they serve.

## Limitations

- My review of recent studies is selective, not systematic.
- Studies without statistically significant findings are not discussed.
- Clinical applications are not addressed.

**Key Words:** *religion, spirituality, depression, anxiety, psychosis, substance abuse*

Despite spectacular advances in technology and science, 90% of the world's population is involved today in some form of religious or spiritual practice.<sup>1</sup> Nonreligious people make up less than 0.1% of the populations in many Middle-Eastern and African countries. Only 8 of 238 countries have populations where more than 25% say they are not religious, and those are countries where the state has placed limitations on religious freedom. Atheism is actually rare around the world. More than 30 countries report no atheists (0%) and in only 12 of 238 countries do atheists make up 5% or more of the population. In Canada, 12.5% of the population are non-religious and 1.9% atheist.

Evidence for religion playing a role in human life dates back 500 000 years ago when ritual treatment of skulls took place during China's paleolithic period.<sup>2</sup> Why has religion endured over this vast span of human history? What purpose has it served and does it continue to serve? I will argue that religion is a powerful coping behaviour that enables people to make sense of suffering, provides control over the overwhelming forces of nature (both internal and external), and promotes social rules that facilitate communal living, cooperation, and mutual support.

Until recent times, religion and mental health care were closely aligned.<sup>3</sup> Many of the first mental hospitals were

located in monasteries and run by priests. With some exceptions, these religious institutions often treated patients with far more compassion than state-run facilities prior to 19th-century mental health reforms (reforms often led by religious people such as Dorothea Dix and William Tuke). In fact, the first form of psychiatric care in the United States was moral treatment, which involved the compassionate and humane treatment of people with mental illness—a revolutionary notion at a time when patients were often put on display and (or) housed in despicable conditions in the back wards of hospitals or prisons.<sup>4</sup> Religion was believed to have a positive, civilizing influence on these patients, who might be rewarded for good conduct by allowing them to attend chapel services.

However, in the late 19th century, the famous neurologist Jean Charcot and his star pupil, Sigmund Freud, began to associate religion with hysteria and neurosis. This created a deep divide that would separate religion from mental health care for the next century, as demonstrated by the writings of 3 generations of mental health professionals from Europe, the United States, and Canada.<sup>5-8</sup>

Today, attitudes toward religion in psychiatry have begun to change. The American College of Graduate Medical Education now states in its Special Requirements for Residency Training for Psychiatry<sup>9</sup> that all programs must provide training on religious or spiritual factors that influence psychological development. Part of this change has been driven by scientific research during the past 2 decades that suggests religious influences need not always be pathological, but can actually represent resources for health and well-being.

## Definitions

Before reviewing the research, religion and spirituality must be defined, because these terms have ambiguous meanings that may affect the interpretation of research findings. The definition of religion is generally agreed on and involves beliefs, practices, and rituals related to the sacred. I define the sacred as that which relates to the numinous (mystical, supernatural) or God, and in Eastern religious traditions, to Ultimate Truth or Reality. Religion may also involve beliefs about spirits, angels, or demons. Religions usually have specific

beliefs about life after death and rules about conduct that guide life within a social group. Religion is often organized and practiced within a community, but it can also be practiced alone and in private. However, central to its definition is that religion is rooted in an established tradition that arises out of a group of people with common beliefs and practices concerning the sacred.

In contrast with religion, spirituality is more difficult to define. It is a more popular expression today than religion, as many view the latter as divisive and associated with war, conflict, and fanaticism. Spirituality is considered more personal, something people define for themselves that is largely free of the rules, regulations, and responsibilities associated with religion. In fact, there is a growing group of people categorized as spiritual-but-not-religious, who deny any connection at all with religion and understand spirituality entirely in individualistic, secular terms. However, this contemporary use of spirituality is different from its original meaning.

According to Philip Sheldrake,<sup>10</sup> professor of applied theology at the University of Durham, England, the origin of the word spiritual lies in the Latin term *spiritualis*, which is derived from the Greek word *pneumatikos*, as it appears in Paul's letters to the Romans and Corinthians. A spiritual person was considered someone with whom the Spirit of God dwelt, often referring to the clergy.<sup>10, p 3</sup> In the Second Vatican Council, spirituality replaced terms such as ascetical theology and mystical theology. Although the Greeks used the word spiritual to distinguish humanity from nonrational creation, spiritual and (or) spirituality has been distinctly religious throughout most of Western history. It was not until much later that Eastern religions adopted the term. Then, spiritual people were a subset of religious people whose lives and lifestyles reflected the teachings of their faith tradition. Spiritual people were those such as Teresa of Ávila, John of the Cross, Siddhartha Gautama, Mother Teresa, or Mahatma Gandhi.

The term spirituality in health care has now expanded far beyond its original meaning. This expansion has resulted from attempts to be more inclusive in pluralistic health care settings, to address the needs both of religious and of non-religious people. This degree of inclusiveness, while admirable in the clinic, makes it impossible to conduct research on spirituality and relate it to mental health, as there is no unique, distinct, agreed-on definition. Thus researchers have struggled to come up with measures to assess spirituality.

When measured in research, spirituality is often assessed either in terms of religion or by positive psychological, social, or character states. For example, standard measures of spirituality today contain questions asking about meaning and purpose in life, connections with others, peacefulness,

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### Abbreviations used in this article

5-HT	5-hydroxytryptamine (serotonin)
5-HT1A	5-beta hydroxytryptamine receptor 1
CASA	National Center on Addiction and Substance Abuse
MADRS	Montgomery-Asberg Depression Rating Scale
MDD	major depressive disorder
RCT	randomized controlled trial
RS	religion and (or) spirituality

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existential well-being, and comfort and joy. This is problematic, as it assures that spirituality in such studies will be correlated with good mental health. In other words, spirituality—defined as good mental health and positive psychological or social traits—is found to correlate with good mental health. Such research is meaningless and tautological. To avoid this methodological problem and to maintain the purity and distinctiveness of the construct, I have proposed that spirituality be defined in terms of religion,<sup>11</sup> where religion is a multidimensional construct not limited to institutional forms of religion. Thus I will either refer to religion or use the terms religion and spirituality synonymously (for example, as RS).

### Religion as a Coping Behaviour

Systematic research in many countries around the world finds that religious coping is widespread. For the general population, research published in *The New England Journal of Medicine* found that 90% of Americans coped with the stress of September 11th (2001) by “turning to religion.”<sup>12, p 1507</sup> During the week following the attacks, 60% of Americans attended a religious or memorial service and Bible sales rose 27%.<sup>13</sup> Even prior to the year 2000, more than 60 studies had documented high rates of religious coping in patients with an assortment of medical disorders ranging from arthritis to diabetes to cancer.<sup>14</sup> One systematic survey of hospitalized medical patients ( $n = 330$ ) found that 90% reported they used religion to cope, at least to a moderate extent, and more than 40% indicated that religion was the most important factor that kept them going.<sup>15</sup>

Psychiatric patients also frequently use religion to cope. A survey of patients ( $n = 406$ ) with persistent mental illness at a Los Angeles County mental health facility found that more than 80% used religion to cope.<sup>16</sup> In fact, most patients spent as much as one-half of their total coping time in religious practices such as prayer. Researchers concluded that religion serves as a “pervasive and potentially effective method of coping for persons with mental illness, thus warranting its integration into psychiatric and psychological practice.”<sup>16, p 660</sup> In another study, conducted by the Center for Psychiatric Rehabilitation at Boston University, adults with severe mental illness were asked about the types of alternative health care practices they used.<sup>17</sup> A total of 157 people with schizophrenia, bipolar disorder, or MDD responded to the survey. People with schizophrenia and MDD reported that the most common beneficial alternative health practice was an RS activity (more than one-half reported this); for those with bipolar disorder, only meditation surpassed RS activity (54%, compared with 41%).

Religious coping is likewise prevalent outside the United States. A study of psychiatric patients ( $n = 79$ ) at Broken Hill

Base Hospital in New South Wales found that 79% rated spirituality as very important, 82% thought their therapist should be aware of their spiritual beliefs and needs, and 67% indicated that spirituality helped them to cope with psychological pain.<sup>18</sup> A survey of patients ( $n = 52$ ) with lung cancer in Ontario asked about sources of emotional support. The most commonly reported support systems were family (79%) and religion (44%).<sup>19</sup> Finally, a study of outpatients ( $n = 292$ ) with cancer seen at the Northwestern Ontario Regional Cancer Centre, Thunder Bay, found that, among all coping strategies inquired about, prayer was used by the highest number (64%).<sup>20</sup>

Why is religious coping so common among patients with medical and psychiatric illness? Religious beliefs provide a sense of meaning and purpose during difficult life circumstances that assist with psychological integration; they usually promote a positive world view that is optimistic and hopeful; they provide role models in sacred writings that facilitate acceptance of suffering; they give people a sense of indirect control over circumstances, reducing the need for personal control; and they offer a community of support, both human and divine, to help reduce isolation and loneliness. Unlike many other coping resources, religion is available to anyone at any time, regardless of financial, social, physical, or mental circumstances.

I will review studies examining the relation between religion and mental health in 5 areas: depression, suicide, anxiety, psychotic disorders, and substance abuse. While some studies report no association between religious involvement and mental health, and a handful of studies have reported negative associations, the majority (476 of 724 quantitative studies prior to the year 2000, based on a systematic review) reported statistically significant positive associations.<sup>21</sup> Because space is limited, I will briefly mention the results of that systematic review and then examine, in more detail, studies that exemplify research published more recently.

### Depression

Prior to 2000, more than 100 quantitative studies had examined the relation between religion and depression.<sup>22</sup> Among 93 observational studies, two-thirds found significantly lower rates of depressive disorder or fewer depressive symptoms among the more religious. Among 34 studies that did not, only 4 found being religious was associated with significantly more depression. Among 22 longitudinal studies, 15 found that greater religiousness at baseline predicted fewer depression symptoms or faster remission of symptoms at follow-up. Among 8 RCTs, 5 found that religious-based psychological interventions resulted in faster symptom improvement, compared with secular-based therapy or with control subjects. Supporting these findings was a more recent

independently published meta-analysis of 147 studies that involved nearly 100 000 subjects.<sup>23</sup> The average inverse correlation between religious involvement and depression was  $-0.10$ , which increased to  $-0.15$  for studies in stressed populations. While this correlation appears small and weak, it is of the same magnitude as seen for sex (a widely recognized factor influencing the prevalence of depression).

Moreover, individual studies in stressed populations, particularly people with serious medical illness, find a more substantial impact for religion on the prevalence and course of depression. For example, depressed medical inpatients ( $n = 1000$ ) aged 50 years or older with either congestive heart failure or chronic pulmonary disease were identified with depressive disorder using the Structured Clinical Interview for Depression.<sup>24</sup> The religious characteristics of these patients were compared with those of nondepressed patients ( $n = 428$ ). Depressed patients were significantly more likely to indicate no religious affiliation, more likely to indicate spiritual but not religious, less likely to pray or read scripture, and scored lower on intrinsic religiosity. These relations remained robust after controlling for demographic, social, and physical health factors. Among the depressed patients, severity of depressive symptoms was also inversely related to religious indicators.

Among these 1000 depressed patients, investigators followed 865 for 12 to 24 weeks, examining factors influencing speed of remission from depression.<sup>25</sup> The most religious patients (those who attended religious services at least weekly, prayed at least daily, read the Bible or other religious scriptures at least 3 times weekly, and scored high on intrinsic religiosity) remitted from depression more than 50% faster than other patients (hazard ratio = 1.53, 95% CI 1.20 to 1.94), controlling for multiple demographic, psychosocial, psychiatric, and physical health predictors of remission. Several other studies have similarly shown a positive impact for religion on course of depression.<sup>26-28</sup>

However, for psychiatric patients there have been few studies on the course of depression. Bosworth et al<sup>29</sup> interviewed elderly psychiatric inpatients ( $n = 104$ ), assessing public and private religious practices and religious coping. Depressive symptoms were assessed at baseline and 6 months later by a psychiatrist using the MADRS. Baseline positive religious coping predicted significantly less depression on the MADRS at the 6-month evaluation, an effect independent of social support measures, demographics, use of electroconvulsive therapy, and number of depressive episodes.

At least 2 studies (both cross-sectional) have examined relations between religious involvement and depression in Canada, one reporting an inverse relation and the other finding a positive relation. O'Connor and Vallerand<sup>30</sup> examined associations between religious motivation and personal

adjustment in a sample of elderly French-Canadians ( $n = 176$ ) drawn from nursing homes in the greater Montreal area. Intrinsic religiosity was inversely related to depression and positively related to life satisfaction, self-esteem, and meaning in life. In the second study, Sorenson et al<sup>31</sup> followed teenaged mothers ( $n = 261$ ) (87% unmarried) before delivery and 4 weeks after delivery in southwestern Ontario. They examined the relation between religion and depressive symptoms during the first few weeks after babies were born. Catholics and teenagers affiliated with more conservative religious groups scored significantly higher on depression, and those who attended religious services more frequently also had higher depression scores. However, the highest depression scores were among girls who cohabitated with someone while continuing to attend religious services.

Baetz and colleagues<sup>32,33</sup> have shown in large cross-sectional community surveys of the Canadian population that religious attendance is associated with less depression and fewer psychiatric disorders. However, participants indicating that spiritual values were important or perceived themselves as spiritual or religious had higher levels of psychiatric symptoms. The researchers speculated that these people could have turned to RS to reframe difficult life circumstances associated with psychiatric illness. Bear in mind that the studies were conducted in largely healthy community-dwelling adults with relatively low stress levels.

Two additional unpublished dissertations<sup>34,35</sup> report studies of RS and depression in Canadian men with prostate cancer and in bereaved caregivers of Canadians dying from AIDS. Both demonstrated positive effects for RS involvement on posttraumatic growth and coping with illness. Supporting the findings of the Canadian caregiver study, Fenix et al<sup>36</sup> at Yale University recently followed caregivers ( $n = 175$ ) of recently deceased cancer patients for 13 months, examining associations between religiousness and the development of MDD.<sup>36</sup> Religious caregivers were significantly less likely to have developed MDD by the 13-month follow-up, a finding that persisted after adjusting for other risk factors. The same results have been reported for caregivers of patients with Alzheimer disease.<sup>37,38</sup>

Thus studies in medical patients, older adults with serious and disabling medical conditions, and their caregivers suggest that religious involvement is an important factor that enables such people to cope with stressful health problems and life circumstances. However, this may not be true in all populations, as studies of pregnant unmarried teenagers and nonstressed community populations above suggest.

Critics say that most studies reporting positive results are observational and that some unmeasured characteristic may be related both to religion and to depression, confounding the

relation. In particular, genetic factors have been implicated. In a fascinating study that examined the relation of spirituality to brain 5-HT1A binding using positive emission tomography, investigators found that 5-HT1A binding was lower in people who were more spiritually accepting. Note that lower 5-HT1A binding—the same pattern seen with spirituality—has been found in patients with anxiety and depressive disorders.<sup>39–41</sup> Thus, rather than being genetically less prone to depression, RS-oriented people may be at increased risk for mood disorders based on their 5-HT receptor binding profile.

## Suicide

In Koenig et al's<sup>42</sup> systematic review of research conducted before 2000, 68 studies were identified that examined the religion–suicide relation. Among those studies, 57 found fewer suicides or more negative attitudes toward suicide among the more religious, 9 showed no relation, and 2 reported mixed results. Seven of the studies were conducted in Canada, and of those, 5 found fewer suicides or more negative attitudes toward suicide among the more religious, 1 found no association, and 1 reported mixed results.

While recent research suggests that religion prevents suicide primarily through religious doctrines that prohibit suicide,<sup>43</sup> there is also evidence that the comfort and meaning derived from religious beliefs may be relevant<sup>44</sup> and may be especially important in people with advanced medical illness.<sup>45</sup> Religious involvement may also help to prevent suicide by surrounding the person at risk with a caring, supportive community.<sup>46</sup>

## Anxiety

While religious teachings have the potential to exacerbate guilt and fear that reduce quality of life or otherwise interfere with functioning, the anxiety aroused by religious beliefs can prevent behaviours harmful to others and motivate pro-social behaviours. Religious beliefs and practices can also comfort people who are fearful or anxious, increase sense of control, enhance feelings of security, and boost self-confidence (or confidence in Divine beings).

Prior to 2000, at least 76 studies had examined the relation between religious involvement and anxiety.<sup>47</sup> Sixty-nine studies were observational and 7 were RCTs. Among the observational studies, 35 found significantly less anxiety or fear among the more religious, 24 found no association, and 10 reported greater anxiety. However, all 10 of the latter studies were cross-sectional, and anxiety and (or) fear is a strong motivator of religious activity. People pray more when they are scared or nervous and feel out of control (“There are no atheists in foxholes”). Then, cross-sectional studies are less useful than longitudinal studies or RCTs. Among the 7 RCTs examining the effects of a religious intervention on subjects

with anxiety (usually generalized anxiety disorder), 6 found that religious interventions in religious patients reduced anxiety levels more quickly than secular interventions or control subjects. Studies of Eastern spiritual techniques, such as mindfulness meditation (from the Buddhist tradition), report similar effects,<sup>48,49</sup> although their efficacy in anxiety disorders has recently been questioned.<sup>50</sup>

More recent longitudinal studies add to this literature, and provide information on mechanisms. Wink and Scott<sup>51</sup> followed subjects ( $n = 155$ ) for nearly 30 years, from middle age into later life, studying the impact of religious beliefs and involvement on death anxiety. Analyses revealed no linear relations between religiousness, fear of death, and fear of dying. Subjects with the lowest anxiety levels were those who were either high or low on religiousness. Anxiety was highest among subjects who were only moderately religious, and in particular, those who affirmed belief in an afterlife but were not involved in any religious practices. Researchers concluded that it was the degree of religious involvement that was important in lessening death anxiety not simply belief in an afterlife.

Religious involvement may also interact with certain forms of psychotherapy to enhance response to therapy. Investigators at the University of Saskatchewan explored coping and motivation factors related to treatment response in patients ( $n = 56$ ) with panic disorder participating in a clinical trial.<sup>52</sup> Subjects were treated with group cognitive-behavioural therapy, and then were followed up at 6 and 12 months after baseline evaluation. Self-rated importance of religion was a significant predictor of panic symptom improvement and lower perceived stress at the 12-month follow-up.

While positive forms of religious coping may reduce anxiety in highly stressful circumstances, negative forms of religious conflict may exacerbate it. For example, one recent study<sup>53</sup> of women ( $n = 100$ ) with gynecological cancer found that women who felt that God was punishing them, had deserted them, or did not have the power to make a difference, or felt deserted by their faith community, had significantly higher anxiety. These results persisted after multiple statistical controls, and are consistent with other studies<sup>54,55</sup> in medical patients.

## Psychotic Disorders

Psychiatric patients with psychotic disorders may report bizarre religious delusions, some of which can be difficult to distinguish from so-called normal religious or cultural beliefs. About 25% to 39% of psychotic patients with schizophrenia and 15% to 22% of those with bipolar disorder have religious delusions.<sup>56</sup> Do religious beliefs play a role in the etiology of psychotic disorders or might they adversely affect the course of these disorders or response to treatment?

Alternatively, might nondelusional religious beliefs and practices help these patients to cope with psychological and social stresses, thus serving to prevent exacerbations of illness?

Unfortunately, there are relatively few studies—particularly from the United States or Canada—that have examined the relation between religion and psychotic symptoms. In an earlier review of the literature, Koenig et al<sup>57</sup> identified 16 studies. Among the 10 cross-sectional studies, 4 found less psychosis or psychotic tendencies among people more religiously involved, 3 found no association, and 2 studies reported mixed results. The final study,<sup>58</sup> conducted in London, England, found religious beliefs and practices significantly more common among depressed ( $n = 52$ ) and schizophrenic psychiatric ( $n = 21$ ) inpatients, compared with orthopedic control subjects ( $n = 26$ ).

More recent research, from Great Britain, Europe, the Middle East, and the Far East, helps to clarify these relations. One of the largest and most detailed studies from Great Britain examined the prevalence of religious delusions among inpatients ( $n = 193$ ) with schizophrenia.<sup>59</sup> Subjects with religious delusions (24%) had more severe symptoms, especially hallucinations and bizarre delusions, poorer functioning, longer duration of illness, and were on higher doses of antipsychotic medication, compared with patients with other kinds of delusions.

The content of religious delusions may be influenced by local religions or culture. A small study<sup>60</sup> of 4 Chinese patients with schizophrenia in Hong Kong, China, reported that religious content reflected Chinese beliefs involving Buddhist gods, Taoist gods, historical heroic gods, and ancestor worship. In a larger and more systematic study<sup>61</sup> of Austrian ( $n = 126$ ) and Pakistani ( $n = 108$ ) patients with schizophrenia, investigators found more grandiose, religious, and guilt delusions in the Austrian patients (largely Christian) than in the Pakistani patients (largely Muslim). In the largest study to date,<sup>62</sup> investigators compared the delusions of inpatients ( $n = 324$ ) with schizophrenia in Japan with patients in Austria ( $n = 101$ ) and in Germany ( $n = 150$ ). Again, religious themes of guilt and (or) sin were more common among patients in Austria and Germany than in Japan; whereas delusions of reference (such as being slandered) were more prevalent because of the role shame plays in Japanese culture.

There is controversy about the impact that religious delusions have on the course of psychotic disorder. While some studies report that patients with schizophrenia and religious delusions have a worse long-term prognosis,<sup>63,64</sup> others do not.<sup>65</sup> In one of the most detailed studies to date, Siddle et al<sup>66</sup> did not find that patients with religious delusions ( $n = 40$ ) or patients who described themselves as religious ( $n = 106$ ) responded less well to 4 weeks of treatment than other patients. However,

patients with religious delusions had more severe illness and greater functional disability than other patients.

Longitudinal studies suggest that nonpsychotic religious activity may actually improve long-term prognosis in patients with psychotic disorders. In a prospective study of patients ( $n = 210$ ) with schizophrenia, Schofield et al<sup>67</sup> reported that regular church attendance was one of 13 factors associated with a good prognosis. In a second study<sup>68</sup> that followed hospitalized African-American patients ( $n = 128$ ) with schizophrenia for 12 months or until rehospitalization, patients from urban areas were less likely to be rehospitalized if their families encouraged religious worship during the hospital stay. Urban and rural patients were both less likely to be hospitalized if their families were Catholic and more likely to be hospitalized if they had no religious affiliation. A third study<sup>69</sup> followed outpatients ( $n = 386$ ) with schizophrenia from clinics in Madras and Vellore, India, for 2 years, examining factors influencing course of illness. Patients who reported a decrease in religious activities at baseline had significantly worse outcomes. Finally, Swedish investigators<sup>70</sup> followed patients ( $n = 88$ ) with adolescent-onset psychotic disorders for 10.6 years, during which 25% of patients attempted suicide. When anxiety and depressive symptoms were controlled for, only satisfaction with religious belief was a significant protective factor.

Most recently, Huguelot et al<sup>71</sup> and Mohr et al<sup>72,73</sup> from the University of Geneva, Switzerland, have published a series of papers on the religious beliefs and practices of outpatients ( $n = 115$ ) with schizophrenia and on their interactions with clinicians. While a majority of patients reported that spirituality was important in their daily lives, only 39% had spoken about their spiritual concerns with clinicians. Many of these patients used religion to cope, with 71% reporting it instilled hope, purpose, and meaning in their lives, (although 14% said it induced spiritual despair), it lessened psychotic and other pathological symptoms in 54% (increased in 10%), increased social integration in 28% (worsened social integration in 3%), reduced suicide attempts in 33% (increased in 10%), reduced substance abuse in 14% (increased in 3%), and increased adherence to psychiatric treatment in 16% (decreased in 15%). Thus, overall, religion played more of a positive than a negative role in the lives and treatment of these patients.

## Substance Abuse

Religious beliefs and practices provide guidelines for human behaviour that reduce self-destructive tendencies and pathological forms of coping. This is particularly evident from research that has examined associations between religious involvement and substance abuse. As a form of social control, most mainstream religious traditions discourage the use

and abuse of substances that adversely affect the body or mind. In a review of studies published prior to 2000, Koenig et al<sup>74</sup> identified 138 that had examined the religion–substance abuse relation, 90% of which found significantly less substance use and abuse among the more religious. Most of these studies were conducted in high school or college students just starting to establish patterns of alcohol and drug use.

Since that review, the CASA at Columbia University reported the results of 3 national US surveys: the 1998 National Household Survey, CASA's National Survey of American Attitudes on Substance Abuse, and the General Social Survey.<sup>75</sup> Adults who did not consider religion very important were 50% more likely to use alcohol and cigarettes, 3 times more likely to binge drink, 4 times more likely to use illicit drugs other than marijuana, and 6 times more likely to use marijuana, compared with adults who strongly believed that religion is important. The same pattern was seen for religious attendance, and an even more pronounced inverse relation between religion and substance abuse was evident in teenagers. In addition, people who both received professional treatment and attended spirituality-based support programs (such as Alcoholics Anonymous or Narcotics Anonymous) were far more likely to remain sober than if they received only professional treatment.

More recent studies support these findings, and emphasize their importance in younger people<sup>76,77</sup> and minority groups, such as African Americans,<sup>78,79</sup> Hispanic Americans,<sup>80,81</sup> and Native Americans and Native Canadians<sup>82</sup>—those at high risk for alcohol and drug use disorders. For example, in a 3-year study of Native Americans in 4 American Indian Reservations in the upper Midwest of the United States and Native Canadians in 5 Canadian First Nations Reserves ( $n = 732$ ), Stone et al<sup>82</sup> found that traditional spiritual activities had a significantly positive effect on alcohol cessation.

While religious influences on substance abuse appear to be generally positive, this is not always the case. When people from religious traditions that promote complete abstinence start using alcohol or drugs, substance use can become severe and recalcitrant. Those people may completely withdraw from religious involvement, resulting in social isolation and worsening mental health owing to feelings of guilt and shame.<sup>83</sup> Further, religious traditions that advocate complete abstinence from alcohol may deprive members of cardiovascular benefits of moderate, controlled drinking.<sup>84</sup>

## Summary and Conclusions

Many people suffering from the pain of mental illness, emotional problems, or situational difficulties seek refuge in religion for comfort, hope, and meaning. While some are helped, not all such people are completely relieved of their mental distress or destructive behavioural tendencies. Thus it should not

be surprising that psychiatrists will often encounter patients who display unhealthy forms of RS involvement. In other instances, especially in the emotionally vulnerable, religious beliefs and doctrines may reinforce neurotic tendencies, enhance fears or guilt, and restrict life rather than enhance it. In such cases, religious beliefs may be used in primitive and defensive ways to avoid making necessary life changes.

However, systematic research published in the mental health literature to date does not support the argument that religious involvement usually has adverse effects on mental health. Rather, in general, studies of subjects in different settings (such as medical, psychiatric, and the general population), from different ethnic backgrounds (such as Caucasian, African American, Hispanic, and Native American), in different age groups (young, middle-aged, and elderly), and in different locations (such as the United States and Canada, Europe, and countries in the East) find that religious involvement is related to better coping with stress and less depression, suicide, anxiety, and substance abuse. While religious delusions may be common among people with psychotic disorders, healthy normative religious beliefs and practices appear to be stabilizing and may reduce the tremendous isolation, fear, and loss of control that those with psychosis experience. Clinicians need to be aware of the religious and spiritual activities of their patients, appreciate their value as a resource for healthy mental and social functioning, and recognize when those beliefs are distorted, limiting, and contribute to pathology rather than alleviate it.

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### Résumé : Recherche sur la religion, la spiritualité et la santé mentale : une revue

Les facteurs religieux et spirituels font l'objet d'un examen croissant dans la recherche psychiatrique. Les croyances et pratiques religieuses ont longtemps été liées à l'hystérie, la névrose et les délires psychotiques. Cependant, des études récentes ont identifié un autre aspect de la religion qui peut servir de ressource psychologique et sociale d'adaptation au stress. Après avoir défini les termes religion et spiritualité, cet article examine la recherche sur la relation entre la religion et (ou) spiritualité, et la santé mentale, en mettant l'accent sur la dépression, le suicide, l'anxiété, la psychose, et la toxicomanie. Les résultats d'une revue systématique précédente sont discutés, et des études plus récentes menées aux États-Unis, au Canada, en Europe, et dans d'autres pays sont décrites. Bien que les croyances et pratiques religieuses puissent représenter de puissantes sources de réconfort, d'espoir et de sens, elles sont souvent étroitement entremêlées à des troubles névrotiques et psychotiques, ce qui rend parfois difficile de déterminer si elles constituent une ressource ou un passif.

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