Religion, spirituality and psychotic disorders

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Abstract

Background: Religion is often included in the beliefs and experiences of psychotic patients, and therefore becomes the target of psychiatric interventions. **Objectives**: This article examines religious beliefs and activities among non-psychotic persons in the United States, Brazil and other areas of the world; discusses historical factors contributing to the wall of separation between religion and psychiatry today; reviews studies on the prevalence of religious delusions in patients with schizophrenia, bipolar disorder, and other severe mental disorders; discusses how clinicians can distinguish pathological from non-pathological religious involvement; explores how persons with severe mental illness use non-pathological religious beliefs to cope with their disorder; examines the effects of religious involvement on disease course, psychotic exacerbations, and hospitalization; and describes religious or spiritual interventions that may assist in treatment. **Methods**: Literature review. **Findings**: While about one-third of psychoses have religious delusions, not all religious experiences are psychotic. In fact, they may even have positive effects on the course of severe mental illness, forcing clinicians to make a decision on whether to treat religious beliefs and discourage religious experiences, or to support them. **Conclusions**: Clinicians should understand the negative and positive roles that religion plays in those with psychotic disorders.

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Psychiatrists often treat patients with psychotic disorders who are religious or spiritual in some way. Most scientifically trained psychiatrists and other mental health professionals believe in a scientific, secular worldview. Sigmund Freud thought that religion caused neurotic and possibly even psychotic symptoms. In *Future of an Illusion*, Freud (1927) wrote:

"Religion would thus be the universal obsessional neurosis of humanity... If this view is right, it is to be supposed that a turning-away from religion is bound to occur with the fatal inevitability of a process of growth…If, on the one hand, religion brings with it obsessional restrictions, exactly as an individual obsessional neurosis does, on the other hand, it comprises a system of wishful illusions together with a disavowal of reality, such as we find in an isolated form nowhere else but amentia, in a state of blissful hallucinatory confusion…"

Thus, Freud thought that religious beliefs were rooted in fantasy and illusion and could be responsible for the development of psychosis (although Freud never directly attributed psychosis to religion, only neurosis). This negative view of religion in the mental health field has continued into modern times with the writings of persons like Albert Ellis (1988) and Wendell Watters (1992), who have emphasized the irrational nature of religious beliefs and their potential harm. The personal religious beliefs of psychiatrists and psychologists (especially when compared to those of the general population) likewise reflect the secular and generally negative views toward religion that are prevalent within the profession (Neeleman & King, 1993; Curlin et al, 2005). For years, religious persons were portrayed as examples of psychiatric illness in diagnostic manuals (prior to DSM-IV) (Larson et al., 1993). This negative perspective regarding religion, however, was not based on systematic research or careful objective observation. Rather, it was based on the personal opinions and clinical experience of powerful and influential persons within the psychiatric academia, who had little experience with healthy religion.

Just as mental health professionals have not valued the role that religion plays in the lives of those with and without mental illness, so too religious communities have developed negative attitudes toward psychologists

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and psychiatrists, who are often seen as either unhelpful or evening threatening to deeply held beliefs that are central to their worldviews. This conflict, in fact, has led to numerous high profile legal cases in the United States, where religious communities did not refer members with severe mental illness for psychiatric care, with devastating results (Whitley, 2006). Both sides are at fault here, not just religious communities, since both sides have contributed to the wall that separates healing practices of religious from mental health communities.

In the last 20 years, more attention has been paid to the scientific study of religion and its relationship to mental health and mental illness. Although much work remains to be done, evidence has been accumulating to help provide more objective answers to questions such as the following. What is the relationship between religion, spirituality and psychosis? Are psychotic persons more likely to be religious? Does religion lead to psychosis? Does psychosis lead to religion? Can religious conversion precipitate psychosis? Can psychosis precipitate religious conversion? How common are religious delusions among those who are psychotic? How does one differentiate "normal" religious or spiritual experiences from psychotic symptoms? What effect does religious involvement have on the course and outcome of psychotic disorders? What effect does psychosis have on persons' religious or spiritual beliefs? These are important questions that are just now starting to be answered by systematic research.

Religious belief and behavior: how common?

In order to understand the relationship between religion, spirituality and pathological psychosis, it is first important to appreciate how common religious involvement is among "normal" persons living in North and South America.

For example, in the United States (U.S.), the latest Gallup Poll (May 8-11, 2006) found that 73% are "convinced God exists" and another 19% say that God "probably exists"; in contrast, 3% say that they are convinced that God does not exist and 4% that God probably doesn't exist, but they are not sure (Newport, 2006a). Interestingly, it is young people (ages 18 to 29 years) who are most likely to say that they are convinced God exists or probably exists. Those with more education and higher incomes, however, are less likely to believe in God. The same Gallup survey above found that 77% of people in the U.S. believe that the Bible is the actual word of God (28%) or the inspired word of God (49%) (Newport, 2006b). Persons who were older, had less education, or those from the southern U.S. were more likely to believe in the Divine origin of the Bible.

In terms of religious behaviors, based on 11,050 interviews conducted between 2002 and 2005, Gallup polls found that 45% of persons in the U.S. attend religious services weekly or almost every week (Newport, 2006c). Older adults are more likely to attend than younger adults, and women are more likely to attend than men. With regard to prayer, Gallup polls since the 1930's have shown that 9 out of 10 persons in the United States pray, with 84% engaged in conversational prayer, 52% in meditative prayer (quietly thinking about God, trying to listen to God), 42% in petitionary prayer (asking God for something), and 19% in ritual prayer (reading from a book of prayers or reciting memorized prayers) (Gallup, 2003).

What about South America? Although there is no comparable detailed Gallup Poll data, the World Health Organization surveyed 5,087 persons in 18 countries, including 225 in Argentina, 493 in Brazil (Porto Alegre and Santa Maria), and 251 in Uruguay (Saxena, 2006). Among Christian countries outside of Africa, Brazil had the highest percentage of respondents who indicated they were "moderately" or "very much – extremely" religious (80 to 90%), similar to if not greater than religious involvement described above in the United States. Thus, "normal" Americans – whether they come from the north or the south – are often very religious.

Furthermore, there is evidence that people become even *more religious* when they are sick, whether physically or mentally. In situations of high psychological stress, religion is often used to help cope with or adapt to the distressing circumstances. People cry out to God for help; they pray; they perform religious rituals; or they seek comfort and support from members of their religious communities. For example, 90% of persons in the United States turned to religion as a way of coping with the September 11th terrorist attacks in New York City (Schuster et al., 2001). Thus, it should not be surprising to find that persons in America who are psychotic and suffering from severe and persistent mental illness (i.e., highly stressful conditions) may also be quite religious.

In the rest of the paper, I will examine how religious beliefs, practices and experiences influence the clinical presentation, assessment, course and outcome of mental disorders with psychosis. First, I will review research that describes the presentation and prevalence of religious delusions, the prevalence of "normal" religious beliefs, experiences and practices in psychotic persons, and the relationship between religious conversion and psychosis. Second, I will discuss issues related to the diagnosis of psychosis in religious persons, seeking to separate out culturally normative religious belief and practice from psychotic symptoms. Third, I will examine the use of religion by persons with severe mental illness to cope with their conditions, and explore how psychotic and non-psychotic religious beliefs and practices influence the outcome and course of mental disorders with psychosis. Finally, I will discuss spiritual interventions that may facilitate the treatment of persons with severe mental illness with psychosis.

Religious delusions

How common are religious delusions found among persons with psychotic disorders? Prevalence rates depend on the particular psychotic disorder and the location in the world where the person lives. In less religious areas of the world, for example, one study showed that only 7% of 324 Japanese inpatients had delusions of persecution and religious guilt (Tateyama et al., 1998). This rate is similar to those from a nation-wide study of hospitalized patients with schizophrenia in Japan involving 429 patients, where the prevalence of religious delusions was 11% (Kitamur et al., 1998).

In the United States, a number of studies have examined religious delusions in patients with schizophrenia or bipolar disorder. The first of these reported results of a small study of 41 psychotic patients in New York City, finding that 39% of those with schizophrenia and 22% of those with mania had religious delusions (Cothran & Harvey, 1986). In a much larger study of 1,136 psychiatric inpatients in the mid-western and eastern United States, 25% of patients with schizophrenia and 15% of those with bipolar disorder had religious delusions (Appelbaum et al., 1999). Compared to other delusions, religious delusions appeared to be held with greater conviction than other delusions. Finally, Getz and colleagues (2001) compared the frequency of religious delusions across religious denomination in 133 inpatients (74% schizophrenia) at the University of Cincinnati Medical Center. Religious delusions were documented in 24% of 33 non-religious patients, 43% of 71 Protestant patients, and 21% of 29 Catholic patients.

In Europe and Great Britain, one study of 251 inpatients with schizophrenia in Austria and Germany reported a prevalence rate of 21% for religious delusions (Tateyama et al., 1998). One of the most detailed studies to date from Great Britain found that 24% of 193 patients with schizophrenia had religious delusions (Siddle et al., 2002a). Patients with religious delusions had more severe hallucinations and bizarre delusions, had poorer functioning, a longer duration of illness, and were taking more anti-psychotic medication than other patients. Thus, in studies of patients with schizophrenia, religious delusions are present in 7-11% of Japanese patients, 21-24% of Western European patients, and 21-43% of patients in the United States.

A few studies have also examined religious delusions among psychiatric patients in Brazil. Nucci and Dalgalarrondo report a series of eye enucleation in six cases of psychiatric patients, five unilateral and one bilateral enucleation (Mucci & Dalgalarrondo, 2000). Religious delusions were a significant factor in many of these cases, with patients following Matthew 5:29 – "If your right eye causes you to sin, gouge it out and throw it away. It is better for you to lose one part of your body than for your whole body to be thrown into hell." These patients often had an acute exacerbation of schizophrenia, and the self-inflicted enucleation occurred many years after the beginning of illness. Six cases were seen within a 10-year period at a Brazilian university hospital.

In the only systematic study of psychiatric patients conducted thus far in Brazil, researchers examined 200 consecutive admissions to a general psychiatric hospital (Dantas et al., 1999). To identify religious content, an item was added to the BPRS-extended form. Patients with all psychiatric diagnoses were included, not just those with psychotic disorders. Investigators report that 15.7% of all patients had moderate to intense symptoms of religious content. A strong correlation was found between manic symptoms and religious experiences.

What is the origin of religious delusions? Religious delusions exist on a continuum between the normal beliefs of healthy individuals and the fantastic beliefs of the psychotic patients. In psychotic patients, religious delusions are usually accompanied by other symptoms and/or behaviors of mental illness, and do not appear to serve any positive function (Siddle et al., 2002a). Persons with psychotic symptoms are known to have increased activation of the right brain hemisphere, which is also found in healthy persons having mystical experiences or paranormal beliefs (Lohr & Caligiuri, 1997; Pizzagalli et al., 2000; Makarec & Persinger, 1985). However, attempts to locate the origin of religious delusions in the brain have not revealed findings that are consistent with neuroimaging research described above. The only study to date, to my knowledge, suggested that religious delusions result from a combination of over-activity of the left temporal lobe and under-activity of the left occipital lobe (Puri et al., 2001). Thus, until more research is done, the neuroanatomical origin of religious delusions remains uncertain.

Non-psychotic religious involvement

To what extent are persons with severe and persistent mental illness involved in non-psychotic religious activity? Are they any more prevalent in those with severe mental illness than in normal, healthy populations? A number of studies provide information in this regard.

In a study of 41 patients with schizophrenia from New York City, investigators found that patients with religious delusions were overall more religious than non-delusional patients and persons without mental illness (Cothran & Harvey, 1986). A second study of 131 patients in Cincinnati, Ohio, found that frequency of involvement in religious community activities (such as church, church groups, and religious study groups) was associated with higher ratings of religious delusions ($r=0.27$, $p<0.01$) (Getz et al., 2001). Unclear in this study, as in most studies, is how investigators distinguished "normal" religious activity from religious delusions or other pathological expressions of religious activity.

Studies in Great Britain have also consistently found an association between religious involvement

and psychotic symptoms. Neeleman and Lewis (1994) compared religious practices, beliefs, attitudes, and experiences of 21 outpatients with chronic schizophrenia, 52 non-psychotic psychiatric outpatients, and 26 normal controls with physical health problems (London). Patients with schizophrenia reported more religious experiences and attitudes (but not religious practices) compared to control patients with psychiatric and medical illness. Feldman and Rust (1989) also found a positive relationship between religiousness and schizotypal thinking in a sample of 67 patients with schizophrenia compared to 140 normal controls (London).

Some of the best and most detailed information on schizophrenia and religious involvement comes from the work of Siddle and colleagues at North Manchester General Hospital in Great Britain. These investigators report positive correlation between religious delusions and religious activity in 193 inpatients with schizophrenia. Patients with religious delusions scored significantly higher on self-assessed religiosity and doctrinal orthodoxy than those without religious delusions. Furthermore, during an average 1-month course of hospitalization and treatment, Siddle and colleagues (2002b) reported that patients' religiousness declined significantly (although the decline was relatively small). These researchers acknowledged difficulty distinguishing psychotic expressions of religious involvement from non-psychotic expressions.

Religion, conversion and psychotic symptoms

Several studies have found that involvement in New Religious Movements (NRM) may either be the cause or the result of psychotic-like traits or symptoms. For example, one study compared the strength of religious belief between 121 non-psychotic and 88 psychotic patients hospitalized at a psychiatric facility in Illinois (Armstrong et al., 1962). Non-psychotic patients had stronger religious believes that psychotic patients in Catholic and Protestant patients, but the opposite was true for Unitarian patients. A second study compared converts to Judaism and Catholicism with converts to Bahai and Hare Krishna religions (10 converts to each tradition) (Ullman, 1988). The researcher found that Bahai and Hare Krishna converts were significantly more likely to report a history of a psychotic episode requiring hospitalization (25% vs. 5%) and to report a chaotic life-style prior to conversion (75% vs. 40%), compared to Jewish and Catholic converts.

In a third study, Peters and colleagues compared scores on a delusional ideas inventory between 45 normal non-religious persons, 38 normal Christians, 26 normal members of Hare Krishna and Druid religions, and 33 psychiatric inpatients with delusions (27 with schizophrenia) (London, England) (Peters et al., 1999). Non-religious patients scored lowest on the delusional inventory, Christian patients intermediary, and normal Hare Krishna/Druid persons and psychotic patients scored the highest; scores of those in the Hare Krishna/Druid group were indistinguishable from those of psychotic.

Much attention has also been paid to the role that religious conversion itself (regardless of specific religious group) may be involved in either the etiology of psychosis or the result of psychosis itself. The speed at which conversion takes place may be particularly important in this regard. William James (1902) wrote that sudden conversion was more likely to occur in the "sick soul" than in the "healthy minded." Wootton and Allen (1983), more recently, reported that the *speed* at which religious conversion occurs influences its impact on mental health. Sudden religious conversion may be quite different from conversion that occurs more gradually, "in the course of real maturing (...) after a reasoned, thoughtful search" (wrote Georgetown University psychoanalyst Leon Salzman) (Salzman, 1953), and its causes or consequences may be different as well.

Although religious conversion often may occur during a period of emotional upheaval or psychological stress, it doesn't have to. For example, in perhaps the largest study of religious conversion to date, Heirich (1977) surveyed 152 generally healthy persons recently converted to Catholicism, compared to 158 controls. The most relevant factors involved in bringing on conversion were discussions with friends, relatives, or religious professionals, not stressful circumstances.

Several studies suggest that religious activity or religious interest changes follow rather than precede psychotic breakdown. Studies conducted in India have found that 22% to 27% of patients with schizophrenia report an increase in religious activity following their diagnosis (ICMR 1988; Bhugra 1999). This may reflect an increased turning to religion to cope with the stress of schizophrenic symptoms in a highly religious population. In a second study, investigators examined patients with first-onset schizophrenia from four ethnic groups in Great Britain: Trinidadian, London White, London Asian, and London African-Caribbean. They found that many of these persons had converted to a new religion after their diagnosis. Researchers suggested that these conversions were at least partly an attempt to regain self-control as their self-concept began to change with the emergence of schizophrenic symptoms (Bhugra, 2002). In that study, it was clear that religious conversion occurred secondary to the development of psychosis, rather than vice-versa.

Pathological vs. non-pathological religion

In religious environments such as India, the United States, or Latin American countries, how does the clinician distinguish normal, culturally appropriate religious beliefs from psychotic symptoms? Unfortunately, it is not always so easy. A delusion is defined as a fixed, false belief that the person cannot be dissuaded from no matter how much

evidence to the contrary. The atheist may readily believe that the religious person suffers from a fixed, false belief, so this depends to some extent on the worldview of the person judging the particular belief. Likewise, deeply religious non-psychotic persons may talk about hearing the voice of God or experiencing a religious vision, such as occurred in Medjugorje, Bosnia-Hercegovina. However, as noted earlier, religious delusions occur in persons with psychosis more than one-quarter to one-third of the time, and may be used to determine whether or not a psychosis is present. Thus, distinguishing religious beliefs and experiences from those that are psychotic becomes an urgent dilemma for the clinician.

Pierre (2001) describes several ways to distinguish normal from psychotic religious experiences. He notes that for religious beliefs or experiences to be pathological, they must impact on the person's ability to function. If social or occupational functioning are not impaired, then the religious belief or experience is not pathological. Related to impairment of function is loss of the ability to hold down a job, legal problems with police or due to failure to fulfill obligations, homicidal or suicidal threats and behaviors, and problems with thinking clearly. The healthy religious person with mystical experiences, on the other hand, will often have a positive outcome over time such as increases in psychological or spiritual maturity and growth.

Others have reinforced the emphasis on ability to function, and have pointed out other distinguishing features (Lukoff, 1985). The psychotic person does not usually have insight into the incredible nature of his or her claims, and may even embellish them, whereas the non-psychotic person usually admits the extraordinary or unbelievable nature of his or her claims. Furthermore, the psychotic person will have difficult establishing "intersubjective reality" with other persons in their psychosocial or religious environment, particularly since they will have other symptoms of psychotic illness that impair with their ability to relate to others. However, psychotic and mystical states may have some much overlap that it is difficult to distinguish one from the other without long-term follow-up and careful observation over time.

Psychiatrist Andrew Sims from Great Britain has provided a set of criteria that may be used in distinguishing persons with religious or spiritual beliefs from those with religious delusions. These criteria include aspects common to the diagnostic distinctions already described above. Sims (1995) notes that for religious delusions:

"1. both the observed behavior and the subjective experience conformed with psychiatric symptoms in that the patient's self-description of the experience is recognizable from the form of the delusion;
2. there were other recognizable symptoms of mental illness in other areas of the individual's life; other delusions, hallucinations, mood or thought disorder and so on;
3. the lifestyle, behavior and direction of the personal goals of the individual after the event or after the religious experience were consistent with the natural history of mental disorder rather than with a personally enriching life experience."

These criteria have already been used in studies by Siddle and colleagues, which have provided evidence for their validity (Siddle et al., 2002a; Siddle et al., 2004).

There is general agreement, then, that specific criteria exist that can help to distinguish the mentally ill person with psychosis from the devoutly religious person having mystical experiences. The religious person has insight into the extraordinary nature of their claims, is usually part of a group of people who share their beliefs and experiences (culturally appropriate), does not have other symptoms of mental illness that affect their thought processes, is able to maintain a job and stay out of legal problems, does not harm himself or herself, and usually has a positive outcome over time. Of course, however, there is always the possibility that a mentally ill person (even those with psychotic illness) will have religious beliefs and mystical experiences that are culturally normative and may in fact help that person cope better with their mental illness.

Religion as a resource and coping behavior

A number of studies suggest that religious beliefs are used to cope with the extreme stress that mental illness can cause. For example, one small study of 28 patients with severe mental illness living in Maryland, investigators found that 47% of these patients indicated that spirituality/religion had helped "a great deal," 57% prayed every day, and 76% thought about God or spiritual/religious matters on a daily basis(Lindgren & Coursey, 1995). Likewise, interviews with 40 psychiatric patients in Springfield, Missouri, found that nearly half (48%) indicated that religious beliefs were very important in helping them to cope with mental illness (Sullivan, 1993). A much larger study of 406 patients at a Los Angeles County mental health facility, reported that more than 80% of patients said they used religion to cope (Tepper et al., 2001). In fact, the majority of patients spent nearly half of the time trying to cope with their illness in religious activities.

In a study of 356 persons in the United States with severe mental illness, investigators compared religious coping between those with schizophrenia, schizoaffective, bipolar, and depressive disorders (Reger & Rogers, 2002). Patients with chronic schizophrenia or schizoaffective disorder were more likely than patients with affective disorders to utilize religious coping. In another study, this one conducted over the Internet, investigators examined alternative health practices of 157

persons with schizophrenia, bipolar disorder, or major depression (Russinova et al., 2002). Many of those with schizophrenia and major depression (56-58%) reported that the most common alternative health practice they used to cope with their illness was religious/spiritual activity. Among patients with bipolar disorder, 54% relied on meditation and 41% on religious or spiritual activity to cope.

Studies in Europe and other more secularized part of the world, report conflicting findings concerning the prevalence of religious coping, depending on the particular study cited. On the one hand, a study that compared small samples of patients with schizophrenia from either Great Britain (n=33) or Saudi Arabia (n=37), those from Saudi Arabia were much more likely to use religion to cope with hallucinations (43% vs. 3% in Great Britain) (Wahass & Kent, 1997). On the other hand, a study of 52 psychotic patients in Great Britain found that 70% said they were religious, 61% used religion to cope with mental illness, 22% indicated that religion was the most important in their ability to make it from day to day, and 30% said that their religiousness had increased since the onset of their illness (Kirov et al., 1998). Likewise, a study of 79 psychiatric patients in New South Wales (near Australia) found dependence on spiritual beliefs widespread. In that study, 79% rated spirituality as very important, 82% thought their therapist should be aware of their spiritual beliefs, and 67% reported that spirituality helped them to cope (D'Souza, 2002).

In Kirov's study of 52 psychotic patients from Great Britain described above, patients who used religion to cope were reported to have better insight into their illness and greater compliance with medication.

Impact of religion on outcome

In the above study, religious coping appeared to impact outcomes in a positive way, since it was associated with greater insight and compliance. Numerous other studies also report a positive influence of non-delusional religious involvement on the course of severe mental illness.

Over 50 years ago, Schofield and colleagues reported that regular church attendance was one of 13 factors associated with a good prognosis in 210 patients with schizophrenia (Schofield et al., 1954). In a study of 128 African-American patients with schizophrenia, religious involvement was examined as a predictor of re-hospitalization (Chu & Klein, 1985). Results depended on whether patients were from urban (n=65) or rural areas. Those from urban areas were less likely to be re-hospitalized if their families encouraged religious worship during hospitalization. In the overall sample, lack of religious affiliation was associated with a greater risk of re-admission, particularly when compared to Catholic patients.

In the largest study to date, 386 outpatients with schizophrenia were followed for two years, examining factors related to hospitalization for worsening psychosis (Verghese et al., 1989). Patients who reported a decrease in religious activities at baseline experienced a more rapid deterioration over time. This study was conducted in India among a largely Hindu patient population.

In a study that took place in secular European country of Sweden, investigators studied 88 patients with adolescent-onset psychotic disorders, most of whom had schizophrenia. Subjects were followed for over 10 years and suicide attempts were determined during that time (by nearly 25% of the sample) (Jarbin & von Knorring, 2004). Religious involvement was among the factors that predicted fewer suicide attempts (along with good family relationships and better health). In fact, when investigators controlled for anxiety and depression, the only variable that predicted fewer suicide attempts was satisfaction with religious belief.

Finally, in a study that examined response to treatment during 4 weeks of hospitalization in 155 patients with schizophrenia, neither level of religious activity nor the presence of religious delusions adversely affected response to treatment compared to other patients (Siddle et al., 2004). In that study, patients with religious delusions had more severe illness and greater functional disability than other patients. Clearly, more studies are needed that carefully measure both delusional and non-delusional religious activity at baseline and carefully follow changes in religious involvement and interest during hospitalization, after discharge, and after antipsychotic drug treatment.

Religious or spiritual interventions

Since many patients with severe mental disorder use religion to cope with their illness, it may be that religious or spiritual interventions could prove helpful. Fallot (2001) describes how the spiritual needs of patients with severe mental disorder can be addressed as part of their treatment. Recommended interventions include taking a spiritual history, addressing spiritual needs in individual psychotherapy once the illness is stabilized, connecting the patient to faith communities and spiritual resources, and conducting spiritually oriented group therapy in outpatient and inpatient settings.

There is concern, though, that such interventions may interfere with or complicate the recovery of persons with severe mental disorder, especially if religious delusions or hallucinations are present. Although the research is clearly at an early stage, studies to date do not find that such approaches worsen or exacerbate psychotic illness, especially when applied in a thoughtful, sensitive manner. I will now review some of these studies, with a focus on spiritually based group therapy that has the potential to provide support, reduce isolation, and address common spiritual concerns of patients with severe mental disorder.

Phillips and colleagues (2002) describe a 7-week semi-structured psycho-educational program provided in a group therapy format designed specifically for person with severe mental disorder. In a typical session, participants discuss religious resources, spiritual struggles, forgiveness, and hope. Kehoe (1999) describes another program based on her experiences over nearly two decades doing spiritual-based group therapy with psychiatric patients. Taking a psychodynamic-oriented approach, she reports spiritual-based group therapy fosters tolerance, self-awareness, and exploration of value systems. However, this is done within carefully set boundaries that promote toleration of diversity and respect for all participants' beliefs.

According to Phillips and Kehoe, members of these groups experience increased understanding of feelings, comfort derived from having spiritual concerns addressed, and increased social connections to others. Using a similar group approach that focuses on spiritual issues, O'Rourke (1997) also found that persons with SPMDP became more connected to their feelings and experienced a greater sense of spiritual and social support as a result of the intervention. These groups are typically held in psychiatric outpatient settings and day treatment centers and include from 6 to 12 members.

Spiritual interventions that take a more individualized approach have also been described. For example, nursing students in Maryland conducted a spiritual intervention with 20 inpatients with schizophrenia (all Christian) at a state mental hospital (Carson & Huss, 1979). The intervention consisted of 10 weeks of spending one-on-one time with patients, focusing on prayer and reading scripture, emphasizing God's love, and reinforcing their value and worth to God. The results indicated that, compared to a control patients, those receiving the spiritual intervention became more able to express their concerns verbally, ventilate anger and frustration, and deal with inner feelings and emotions. These patients were also more motivated to make changes in their lives, demonstrated more appropriate affect, and complained less about somatic symptoms. Outcomes were largely qualitative.

Likewise, Lindgren and Coursey (1995) designed a spiritual intervention consisting of four 1½-hour sessions that sought to improve self-esteem in patients with severe mental disorder, the majority having schizophrenia. Researchers administered this intervention in an open trial format to 28 patients. After the treatment, participants showed an increase in perceived spiritual support, but it had no effect on depression, hopelessness, self-esteem, or purpose in life. In none of the above studies did researchers observe any worsening of symptoms with spiritual approaches.

Research in countries outside the U.S. in different religious and cultural environments has also demonstrated benefits from spiritual approaches. In one study conducted in Southern India, investigators describe the effects of spending time in a Hindu temple (the spiritual intervention) (Raguram et al, 2002). Built over the grave of a revered Hindu teacher, the temple had become known locally as a healing shrine for people with mental illness. Researchers at the National Institute of Mental Health and Neurosciences in Bangalore studied 31 consecutive subjects coming to the temple for help. Subjects lived in the temple for an average of 6 weeks (1 to 24 weeks). Mental diagnoses included paranoid schizophrenia (n=23), delusional disorder (n=6), and bipolar disorder-manic episode (n=2).

The BPRS was administered on entry into the temple and on leaving it. Before and after scores showed a drop in BPRS scores from 52.9 on entry to 42.9 on exit, an average 19% reduction in scores achieved without medication. Researchers also conducted interviews with family caregivers, who reported noticeable improvement in their relatives' conditions during the temple stay. Investigators concluded that, "The observed reduction of nearly 20% in brief psychiatric rating scale scores represents a level of clinical improvement that matches that achieved by many psychotropic agents, including the newer atypical agents" (p 39). They hypothesized that improvements with spiritual approaches could explain the better outcomes for schizophrenia seen in traditional societies.

Spiritual approaches, however, do not always benefit those with severe mental disorder. At least one study has reported an association between spiritual healing practices and schizophrenic relapses. Using a case-control study design, investigators examined 40 older Egyptian patients with schizophrenia, comparing 20 of these patients who reported a spiritual healing with 20 patients who had not (Salib & Youakim, 2001). Subjects were matched for age, gender and duration of illness. Relapses over an 18-month period were retrospectively examined. In this study, spiritual healing was defined as "excessive use of prayers; reading verses of the Koran or the Bible as a form of counseling based on religious relevance (for at least an hour a day); excessive attendance at Mosques or Churches for solitary or group meditations (more than 5 times a week); attending sessions that included the use of witchcraft or related methods (ever) and attending rituals including exorcism and *Zar* processions (ever)." Results indicated that subjects reporting a spiritual healing relapsed more often (17 of 20) than those without such experiences (12 of 20) (p=0.03). However, relapse was particularly common among patients receiving exorcism or witchcraft, who were over four times more likely to relapse (p=0.01). They did not find greater intensity of religious beliefs or frequency of prayer/meditation related to relapse.

Thus, it appears that not all spiritual healing practices are equal in terms of benefits. No spiritual interventions, either individual or group format, have yet to be objectively and rigorously tested for efficacy and safety in randomized clinical trials.

Summary and conclusions

Persons with severe and persistent mental illness often present for treatment with religious delusions. In the United States, approximately 25-39% of patients with schizophrenia and 15-22% of those with mania/bipolar disorder have religious delusions. In Great Britain and Europe, 21-24% of patients with schizophrenia have religious delusions, and in Japan the rate is 7-11%. Less information is available for Brazil, but rates of religious delusions exceeding 15% are likely. Non-psychotic religious belief and activity is also quite common among persons with severe mental illness, and these are often used to cope with the severe psychosocial stress caused by such illness.

Psychotic vs. non-psychotic beliefs and experiences may be difficult to distinguish from one another in some cases, although there are ways described here that clinicians can make such distinctions. This is particularly important since non-psychotic religious involvement may have a positive impact on the course of illness and frequency of psychotic exacerbations, and so deserves support and encouragement by clinicians. Religious delusions, on the other hand, may portent a worse prognosis and so should be vigorously treated.

Spiritual interventions – particularly when administered in a group format – may influence the course of severe mental illness in a number of ways, including providing support, addressing their spiritual concerns, and increasing their ability to connect with others. Unfortunately, there is much about the relationship between religion and psychotic illness that remains unknown, suggesting the need for more research. What is already known, however, justifies at least some tentative steps forward. Taking a careful spiritual history, supporting non-psychotic religious involvement, and considering spiritual group interventions for patients who are so inclined seem like reasonable next steps.

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