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Religious coping among psychotic patients: Relevance to suicidality and treatment outcomes

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ABSTRACT

Religious coping is very common among individuals with psychosis, however its relevance to symptoms and treatment outcomes remains unclear. We conducted a prospective study in a clinical sample of $n=47$ psychiatric patients with current/past psychosis receiving partial (day) treatment at McLean Hospital. Subjects completed measures of religious involvement, religious coping and suicidality prior to treatment, and we assessed for psychosis, depression, anxiety and psychological well-being over the course of treatment. Negative religious coping (spiritual struggle) was associated with substantially greater frequency and intensity of suicidal ideation, as well as greater depression, anxiety, and less well-being prior to treatment (accounting for 9.0–46.2% of the variance in these variables). Positive religious coping was associated with significantly greater reductions in depression and anxiety, and increases in well-being over the course of treatment (accounting for 13.7–36.0% of the variance in change scores). Effects remained significant after controlling for significant covariates. Negative religious coping appears to be a risk factor for suicidality and affective symptoms among psychotic patients. Positive religious coping is an important resource to this population, and its utilization appears to be associated with better treatment outcomes.

1. Introduction

The conceptualization of religion within the field of psychiatry has changed considerably since Freud's categorical characterization of this domain as neurosis in 1927 (Freud, 1989). It is now widely recognized that religion can have both a positive as well as negative impact on mental health and illness (Pargament et al., 1998). On the one hand, several studies have found that religious engagement is associated with decreased risk for depression and suicidality in the general population and medical samples (Miller et al., 1997; Koenig et al., 1998; Rasic et al., 2009) less hopelessness among individuals with clinical depression (Murphy et al., 2000), and better treatment outcomes (Rosmarin et al., 2013). Further, research on religious coping consistently suggests that religious behavior and belief are important resources for many people in times of life distress (Pargament et al., 2000). However, negative religious coping (also known as spiritual struggle), involving intrapersonal, interpersonal or existential tensions, questions, and conflicts about spiritual/religious issues, is robustly associated with symptoms of psychiatric and medical illness (McConnel et al., 2006; Ironson et al., 2011) and may even precede the onset of psychopathology in some populations (Pirutinsky et al., 2011). Further research on both the benefits and risks of religious life to psychiatric symptoms and treatment is important, considering that psychiatrists are more likely than other physicians to encounter spiritual domains in clinical settings (Curlin et al., 2007).

Religion is of particular relevance to patients suffering from psychosis. For decades, clinical forensic literature has described the culture-bound presentation of hallucinations and delusions with religious themes (Kraya and Patrick, 1997) and acts of violence committed by patients with such symptoms (Field and Waldfogel, 1995). More recent literature has identified that religious involvement is highly prevalent among psychotic patients – irrespective of the presence of religiously themed symptoms – particularly in the United States (Kroll and Sheehan, 1989; Tepper et al., 2001). Roughly 80% of psychotic patients engage in religious coping (Tepper et al., 2001; Loewenthal, 2007). Furthermore, religion is the most commonly utilized alternative health practice in this population (Russinova and Blanch, 2007), and research suggests that psychotic patients who profess religious beliefs are more likely to seek spiritually-based than medical treatments for their symptoms (Kulhara et al., 2000) and be less medication-compliant (Borras et al., 2007). While religion has been tied to longer duration of psychotic symptoms and poorer functioning, though not clinical severity, in Taiwan (Huang et al., 2011), few studies have examined associations between religion and severity of symptoms or their progression among psychotic patients, and these connections therefore remain largely unclear.

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One landmark study in an outpatient psychotic sample found that positive religious coping was thematically associated with greater subjective hope, comfort, meaning in life, and was perceived to lessen psychotic symptoms (Mohr et al., 2006). Conversely, negative religious coping was subjectively perceived to contribute to negative sense of self, despair, anger, guilt, as well as increased delusions and substance use (Mohr et al., 2006). However, results from quantitative studies vary. On the one hand, current evidence suggests that among psychotic patients, religious coping protects against substance use (Huguelet et al., 2009), and facilitates ethical condemnation of suicide (Huguelet et al., 2007). However, a more recent report found mixed effects of spiritual involvement on outpatient treatment outcomes, depending on baseline levels of positive vs. negative religious coping (Mohr et al., 2011). More research is therefore warranted to evaluate the clinical relevance of religion in this population. In particular, we are unaware of any studies in acute psychiatric settings (inpatient or day treatment programs) that have quantified relationships between religious coping, symptomatology and treatment outcomes.

We therefore conducted a prospective study in which we assessed for both positive and negative religious coping as predictors of pre-treatment symptoms, and subsequent treatment outcomes, in a cohort of psychotic patients at McLean Hospital. We predicted that positive religious coping would be associated with lower symptoms at baseline and greater treatment gains, and that negative religious coping would conversely predict greater pre-treatment symptoms and poorer outcomes.

2. Methods

2.1. Procedures

Over an 8-month period (October, 2010 to June, 2011), $n=47$ patients participated in this study. Subjects were recruited in the context of larger investigation within a diagnostically heterogeneous day treatment program at McLean Hospital for patients with acute symptoms, on the relevance of spirituality and religion to symptoms and treatment outcomes. Patients were approached in a common area during the lunch hour to participate in "a research study". In order to prevent selective recruitment of patients with personal interest in spirituality/religion, the terms "spirituality" and "religion" were not mentioned during recruitment, and the subject matter of the study was only revealed upon provision of formal informed consent. The refusal rate after provision of informed consent was less than 1%, suggesting that this approach was effective in recruiting a largely representative sample of McLean Hospital patients. This study was approved by the McLean Hospital Institutional Review Board, and all subjects provided written informed consent prior to participation. No monetary or other compensation was offered or provided for participation.

All participants engaged in multi-disciplinary treatment, including case management, psychopharmacology management, psycho-vocational counseling, consultation with psychology trainees, milieu therapy, and group treatments focused on the acquisition of Cognitive Behavioral Therapy skills. Mean average length of treatment was 7.95 days (S.D.=4.53). Approximately 50% of patients were referred to the day program as a step-down from inpatient treatment, and approximately 50% of patients were referred from the community (e.g., outpatient psychopharmacology management) for treatment at a higher level of care.

Prior to treatment, diagnoses were conferred with both the Mini International Neuropsychiatric Interview (Sheehan et al., 1998) and consultation with supervising psychiatrists. Overall level of functioning in daily activities was assessed with the Global Assessment of Functioning (GAF). Subjects received an additional interview module prior to treatment to assess for suicidality over the past month. Patients also completed self-report and interview measures of general religious involvement and religious coping. At both the start and conclusion of patients' hospital stay, psychosis, depression, anxiety and psychological well-being were assessed with self-report measures.

2.2. Measures

2.2.1. Demographic characteristics

We assessed for patient age, gender, race, marital status, current employment, previous hospitalization, and homelessness.

2.2.2. Religious involvement

Religious affiliation was assessed with an open ended item (What is your religious preference?) and two additional items assessed for belief in God (To what extent do you believe in God?) and importance of religion (How important is religion in your life?) using a 5-point Likert-type scale with anchors ranging from "Not at All" to "Very". We also included two items from the Duke Religion Index (Koenig et al., 1997) to assess for public (How often do you attend church or other religious services? Anchors ranging from "Never" to "More than once/wk") and private religious activity (How often do you spend time in private religious activities, such as prayer, meditation or Bible study? Anchors ranging from "Rarely or Never" to "More than once a day").

2.2.3. Religious coping

Patients completed the Brief RCOPE (Pargament et al., 1998) a well-validated 14-item measure that assesses how frequently respondents use both positive (e.g., seeking spiritual support/connection, benevolent religious reappraisals) and negative religious coping strategies (e.g., spiritual discontent, punishing God/demonic reappraisals) in response to life stressors. Mean values in the sample were 18.05 (S.D.=3.11) and 17.23 (S.D.=3.24) for positive and negative religious coping, respectively, and both subscales spanned the entire range of possible scores (12–28).

2.2.4. Suicidality

We assessed for pre-treatment suicidal ideation with the Suicidality Module from the Miniature International Neuropsychiatric Interview (Sheehan et al., 1998) a well-validated screening instrument for DSM-IV Axis I symptoms. Patients were asked about the extent to which they experienced suicidal ideation over the past month. Trained raters coded responses using a 4-point Likert-type scale in terms of both frequency (ranging from never to very often) and intensity (ranging from none to severe).

2.2.5. Psychosis

The psychosis subscale from the 24-item Behavior and Symptom Identification Scale [BASIS-24; Eisen et al., 2004], was used to assess psychotic symptoms over the past week. The BASIS-24 has good psychometric properties and has been validated as a reliable assessment of psychopathology and associated distress across various levels of psychiatric care (e.g., inpatient, partial, outpatient). A full range of scores was present at both timepoints and and mean values were .94 (S.D.=0.90) and .73 (S.D.=0.88) at pre- and post-treatment, respectively.

2.2.6. Depression

Patients completed the 10-item Center for Epidemiological Studies Depression Scale (Andresen et al., 1994), a widely used, brief instrument assessing for depression. At pre-treatment, scores ranged from 4 to 31 with a mean of 16.04 (S.D.=7.59) and at post-treatment scores ranged from 4 to 26 with a mean of 12.64 (S.D.=6.53).

2.2.7. Anxiety

We used the abbreviated version of the Penn State Worry Questionnaire (Hopko et al., 2003), a well-validated, single factor, 8-item measure designed to assess worry severity. At both pre- and post- treatment, scores spanned from 8 to 40 (across full range of the scale) with mean values of 27.04 (S.D.=10.05) and 23.95 (S.D.=9.80) at pre- and post-treatment, respectively.

2.2.8. Psychological well-being

The Schwartz Outcome Scale (Blais et al., 2008), a well-validated and reliable measure, was used to assess overall psychological well-being. At pre-treatment scores ranged from 10 to 65 with a mean of 35.0 (S.D.=13.32), and at post-treatment scores ranged from 24 to 70 with a mean of 44.03 (S.D.=12.03).

2.3. Analytic plan

We began by identifying significant covariates in the dataset with an examination of correlations and ANOVAs between demographics, religious involvement, positive and negative religious coping, and pre-treatment suicidality as well as symptoms (psychosis, depression, anxiety and well-being). Demographic variables were unrelated to negative religious coping (*rs* ranging from −0.15 to 0.22, *ns* for all tests), however positive religious coping was associated with age ($r=-0.40$, $p<0.01$) and non-Caucasian race ($r=-0.44$, $p<0.01$). As such, we controlled for age and race in subsequent analyses.

We then created a metric for treatment effects by subtracting pre-treatment scores from post-treatment scores for psychosis, depression, anxiety and psychological well-being. It should be noted that positive change scores indicate greater *improvements* (i.e., reductions) in psychosis, depression and anxiety and *declines* (i.e., increases) in psychological well-being. We then computed correlations between positive and negative religious coping and these variables, and conducted additional analyses controlling for significant covariates using partial correlations. Bonferroni correction was utilized in the interpretation of multiple comparisons.