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Religious Coping and Quality of Life Among Individuals Living With Schizophrenia

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Abstract

Objective—This study investigated the relationship between positive and negative religious coping and quality of life among outpatients with schizophrenia.

Methods—Interviews were conducted with 63 adults in the southeastern United States. Religious coping was measured by the 14-item RCOPE and quality of life by the World Health Organization Quality of Life–BREF. Data were examined via descriptive bivariate statistics and controlled analyses.

Results—Most participants reported participation in private religious or spiritual activities (91%) and participation in public religious services or activities (68%). Positive religious coping was related to the quality-of-life facet of psychological health ($r=.28$, $p=.03$). Negative religious coping and quality of life were inversely related ($r=-.30$, $p=.02$). Positive religious coping was associated with psychological health in the reduced univariate general linear model ($B=.72$, $p=.03$, adjusted $R^2=.08$).

Conclusions—Greater awareness of the importance of religion in this population may improve cultural competence in treatment and community support.

Schizophrenia is among the most stigmatizing of illnesses, with devastating consequences of chronic morbidity, higher mortality, disability, limited social and occupational roles, and poorer quality of life (1–3).

The role of religion in severe mental illness is complex. Research and clinical treatment have focused mainly on religious delusions. Religion may contribute to psychosis or may promote positive coping. Even among persons with religious delusions, religion may offer a form of coping during crises (4). Compared with the general population, individuals with

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schizophrenia give higher ratings to the importance of spirituality in daily living and report more frequent participation in individual and group religious activities (5).

The role of religion in severe mental illness has clinical implications. Psychiatrists are trained to assess for the presence of mental illness but are generally not trained in religious or spiritual assessment (6). Although *DSM-IV* added a new diagnostic category for religious and spiritual problems, it does not provide criteria for distinguishing between normal and abnormal religious experience (6,7). Thus culturally and socially normative religious experiences may be mistaken for religious delusions. However, some guidelines have been developed for assessing religious and spiritual beliefs and behaviors (4).

Religious coping is multidimensional. Religious coping assigns significance to life challenges and provides a sense of meaning and purpose, emotional comfort, personal control, intimacy with others and a higher power, and life transformation (8). Positive religious coping behaviors reinforce belief in a benevolent higher power and connectedness with a religious community. Negative religious coping behaviors reflect belief in a hostile higher power and disconnectedness from a religious community (8).

The purpose of this study was to determine the relationship between religious coping and quality-of-life domains among outpatients living with schizophrenia. More specifically, the two-part research question addressed whether positive religious coping is related to better quality of life and whether the converse is true for negative religious coping. Understanding the role of religiousness and spirituality for individuals living with schizophrenia as measured by quality of life may help to better inform treatment and community support initiatives.

Methods

The cross-sectional study collected data from participants by using semi-structured in-person audio-taped interviews and scales. It is comparable to a study conducted at the University of Geneva and subsequently at the University of Montreal (5). The overall purpose of the research was to investigate the role of religious, spiritual, and personal beliefs and coping practices among individuals living with schizophrenia.

The research was approved by Duke University Medical Center and by the ethics committees of the community mental health clinics that referred patients to the study. To limit selection bias, health workers were asked to present the study flyer to every outpatient whom they felt was competent to participate in the study. Outpatients did not have to be characterized as religious or spiritual to be eligible. Flyers were also posted in the waiting areas of the clinics. If the participant met the initial criteria, an interview was scheduled at the clinic.

Participation criteria included a diagnosis of schizophrenia or schizoaffective disorder for at least two years, no developmental disability, and an age between 18 and 65. A person's ability to complete the assessments was determined by the researcher on a case-by-case basis. After complete description of the study, written informed consent was obtained from all participants. They were each compensated with a \$25 store gift certificate and a parking pass. The original data were collected during 2007 and 2008.

The focus of each interview was the participant's mental illness and the role of religious, spiritual, and personal beliefs and practices in living with severe mental illness from his or her perspective. The data were entered into a laptop computer during the interview by use of the Questionnaire Development System (9). Values were imputed for the few that were missing.

The primary outcome measure, quality of life, was measured with the World Health Organization Quality of Life–BREF (WHOQOL-BREF) (10). This questionnaire has been validated among individuals living with schizophrenia (11). It assesses subjective quality of life within a profile containing five facets of an individual's perception within the last four weeks: physical health, psychological health, social relationships, relationship to one's environment, and overall perception of quality of life and satisfaction with general health. Possible scores on each facet range from 0 to 100 after being transformed and scaled as per instructions (12), with higher scores indicating higher quality of life.

To evaluate positive and negative religious coping, we used the 14-item RCOPE (8). The positive coping pattern consists of religious forgiveness, seeking spiritual support, collaborative religious coping, spiritual connection, religious purification, and benevolent religious reappraisal. The negative pattern consists of spiritual discontent, reappraisal of God as punishing, interpersonal religious discontent, reappraisal of demonic powers, and reappraisal of God's powers. Possible scores on each of the RCOPE subscales range from 0 to 21, with higher scores indicating increased positive or increased negative religious coping.

Covariates used in this study included sociodemographic, health, and clinical factors (13). Bivariate correlations between each of the independent variables of positive and negative religious coping were evaluated in relationship with each of the quality-of-life facets.

The study included two predictors of interest (positive and negative religious coping as measured by the RCOPE), five dependent quality-of-life variables as measured by the WHOQOL-BREF, and 21 potential covariates. The analysis had to contend with two statistical issues. First, the number of potential covariates was large, possibly indicating overcontrol and bias resulting from multicollinearity. Second, with five outcomes, the likelihood of type I error was increased. To limit the number of covariates, we developed a multivariate model (predicting all five health outcomes simultaneously) without respect to the religious variables. Variables that were significantly related ($p < .05$) across any of the five outcomes were retained in the final covariate model.

As a final step, the positive and negative religious variables were each separately added to this model to examine the multivariate relationship of the religious variable across the health outcomes. Compared with use of the Bonferroni correction for type I error for five outcomes, use of multivariate models has a power advantage in circumstances where the outcomes are correlated (14). For each religious variable, only when the multivariate test was statistically significant ($p < .05$) across the five outcomes were follow-up tests performed to determine the particular outcome to which the religious predictor was related. SPSS, version 16.0, was used for this analysis.

Results

Of the 63 participants, 30 (48%) were women. Thirty-nine participants (62%) were African American, 15 (24%) were white, eight (13%) were multiracial, and one (2%) was Native American. Most had a diagnosis of schizophrenia ($N=46$, 73%), and the remaining participants had a diagnosis of schizoaffective disorder. The mean $\pm$ SD age of the sample was 42.2 $\pm$ 11.6. The mean score on the Positive and Negative Syndrome Scale was 79.8 $\pm$ 14.7 (range 49 to 117), indicating moderately severe schizophrenia symptoms.

Most participants were Protestant ($N=45$, 71%). Two-thirds reported participation in religious services or activities, such as prayer groups, meetings, and services ($N=43$, 68%), and most rated the importance of being connected to a religious community as very much to much ($N=40$, 64%). Most reported practicing private religious or spiritual activities, such as

prayer, meditation, and spiritual reading ($N=57$, 91%), and over three-quarters reported praying at least once a day to several times a day ($N=50$, 79%). When asked whether it was probable that “a higher power really exists,” most participants indicated very much or much ($N=57$, 91%), and most believed that their life has meaning ($N=57$, 91%). Participants rated the importance of their beliefs in their everyday life on a scale of 1 to 10 (from not at all to completely); the mean rating for the sample was 8.48 ± 1.92 . [Tables presenting more information on participants’ characteristics and scores on study instruments as well as data from additional analyses are available online as a data supplement to this brief report.]

RCOPE scores indicated a high level of positive religious coping (15.6 ± 4.18) and a low level of negative religious coping (5.21 ± 3.76). For positive religious coping, the highest mean scores were for individual items (based on a scale of 3, a great deal, to 0, not at all) on “I asked forgiveness for my sins” (religious purification) ($2.54 \pm .80$) and “I looked for a stronger connection with God” (spiritual connection) ($2.44 \pm .76$). For negative religious coping, the highest mean scores were for items “I wondered whether God had abandoned me” (spiritual discontent) ($.95 \pm .92$) and “I felt punished by God for my lack of devotion” (reappraisal of God as punishing) ($.90 \pm .93$). The highest mean score for a quality-of-life facet was for overall quality of life and health satisfaction (61.51 ± 22.6), and the lowest was for physical health (53.8 ± 14.8). The highest reported mean score for a quality-of-life item (based on a scale of 1, not at all, to 5, an extreme amount) was “how much do you enjoy life” ($3.83 \pm .98$). The lowest reported mean score for a quality-of-life item was “have you enough money to meet your needs” (2.40 ± 1.36).

A significant positive correlation was found between positive religious coping and the psychological health facet of quality of life ($r=.28$, $p=.03$), and a significant negative correlation was found between negative religious coping and quality of life, one of the two items that make up the facet on overall quality of life and health satisfaction ($r=-.30$, $p=.02$).

Of the 21 covariates, only three—self-reported health, self-esteem, and satisfaction with social functioning—were significantly related to quality of life in the full model. These were included in the final reduced model (Table 1). Next, positive and negative religious coping were each added separately to the final reduced multivariate and univariate models. In the multivariate reduced model, positive and negative religious coping were not significant; however, in the univariate model, positive religious coping was significantly related to the psychological health facet of quality of life ($B=.72$, $p=.03$) (Table 1). Positive religious coping explained approximately 8% of the overall variance of psychological health, with control for the three covariates; almost half of the total variance (adjusted $R^2=.45$) was explained by this reduced model. Negative religious coping was not significantly related to any of the quality-of-life components in any of the models.

Factor analyses confirmed that each substrate or facet of quality of life and religious coping measured distinct conceptual subconstructs, with no items cross-loading.

Discussion

The findings of this study indicate the importance of religion and spirituality in coping with mental illness. Ninety-one percent of participants reported practicing private religious or spiritual activities, and 68% reported public participation in religious services or activities. Positive religious coping was found to be associated at the bivariate level with higher quality of life in the domain of psychological health; it was also significantly associated in the final controlled model with the psychological health domain of quality of life. Negative religious coping was associated at the bivariate level with lower quality of life, although this association was not significant in the controlled model. These findings are similar to those of

prior research on religious coping among individuals with chronic general medical conditions (15).

One limitation of the study is that generalized instruments such as the WHOQOL-BREF and the RCOPE were not designed specifically for outpatients living with schizophrenia, nor do they capture culture-specific data. Future studies should use instruments measuring quality of life and religious coping that have been validated and specifically designed for use with outpatients living with schizophrenia.

Conclusions

This study is one of the first to examine the role of positive and negative religious coping in relation to the multidimensional components of quality of life among outpatients with schizophrenia. A significant strength is that the data reflect the perspective of individuals living with the illness. The findings indicate that religious coping is associated with some domains of quality of life among individuals living with schizophrenia. If these findings are validated, then greater awareness of the importance of religion in this population may lead to improved cultural competency in treatment, services, and community support and strengthen collaboration between clinical and religious community-based organizations to improve social integration.

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Table 1

Final multivariate regression model of associations of three covariates and positive religious coping with five quality-of-life facets among 62 individuals with schizophrenia^a

	Model 1 ^b			Model 2 ^c			Model 3 ^d			Model 4 ^e			Model 5 ^f			Multivariate test (Wilks' λ) ^g
	Overall quality of life and satisfaction with general health			Physical health			Psychological health			Social relationships			Environment			
Variable	B	95% CI		B	95% CI		B	95% CI		B	95% CI		B	95% CI		
Intercept	-11.65	-41.89 to 18.59		8.54	-13.57 to 30.65		24.52 [*]	2.86 to 46.19		35.58 [*]	.97 to 70.18		19.64	-5.08 to 44.36		.77 [*]
Self-reported health	12.24 ^{***}	7.95 to 16.53		5.79 ^{***}	2.66 to 8.93		.82	-2.25 to 3.89		-1.87	-6.78 to 3.04		2.53	-.97 to 6.04		.51 ^{***}
Self-esteem	-.14	-.42 to .14		-.15	-.35 to .06		-.28 ^{**}	-.48 to -.08		-.47 ^{**}	-.79 to -.15		-.33 ^{**}	-.56 to -.10		.72 ^{**}
Satisfaction with social functioning	1.16 ^{**}	.45 to 1.88		.80 ^{**}	.28 to 1.32		1.1 ^{***}	.55 to 1.58		1.24 ^{**}	.42 to 2.06		1.51 ^{***}	.93 to 2.10		.55 ^{***}
Positive religious coping	.44	-.48 to 1.35 ^h		.59	-.09 to 1.26 ⁱ		.72 [*]	.06 to 1.37 ^j		.50	-.55 to 1.55 ^k		-.24	-.98 to .52 ^l		.86

^aThis reduced model controlled for health covariates. The sample size is 62 because of missing values.

^bAdjusted R²= .57

^cAdjusted R²= .46

^dAdjusted R²= .45

^eAdjusted R²= .29

^fAdjusted R²= .52

^gdf=1 and 58

^hR²= .02

ⁱR²= .05

^jR²= .08

^kR²= .02

^lR²= .01

^{*} p<.05;

^{**} p<.01;

100>d