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The Association of Public and Private Religious Involvement with Severity of Depression and Hopelessness in Older Adults Treated For Major Depression

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Abstract

Objective—We assessed the association between public and private religious participation and depression as well as hopelessness in older depressed, adults treated in mental health settings.

Methods—Data from 130 participants from a post-treatment longitudinal follow-up study of late-life depression were analyzed. Multiple regression analyses were performed to assess the association between public (frequency of church attendance) and private (frequency of prayer/meditation) forms of religious participation and depression as well as hopelessness severity when demographic and health indicators were controlled.

Results—Multivariate analyses found significant negative associations between frequency of prayer/meditation and depression (OR= 0.56 [0.36, 0.89], Wald chi square=5.93, df=1) as well as hopelessness (OR= 0.58 [0.36, 0.94], Wald chi square=4.97, df=1) severity.

Conclusion—This study supports significant, direct relationships between prayer/meditation and depression as well as hopelessness severity in older adults treated for depression in mental health settings. Prospective studies are needed to further illuminate these relationships.

Keywords

Religious Involvement; Depression; Hopelessness; Older Adults

INTRODUCTION

Older individuals see religious involvement as an important form of coping with the stressors of aging.¹ Public (e.g., frequency of church attendance) and private (e.g., prayer, and one's strength of spiritual beliefs) forms of religious involvement may convey both social and psychological protection from depression and hopelessness.²

The existing literature on the association between different forms of religious involvement, although showing a relationship between public and private forms of religious involvement and depression/hopelessness, does not make clear the possible differential roles of public and private religious participation. This is an important issue for different forms of religious participation suggest different mechanisms of action. For instance, public participation effects may be related to social integration and social support while private participation may reflect an ability to achieve inner peace and comfort through God.

Another gap in the religion and mental health literature is there are no studies that have assessed the association between religious involvement in older individuals who are treated for depression in mental health settings. Older individuals treated for depression in mental health settings may have different clinical and psychosocial characteristics from older, depressed individuals participating in community survey studies or receiving depression care in medical settings. For example, greater severity of depressive illness is likely to characterize individuals who have sought specialty mental health services.

To address these gaps in the literature, we addressed the following question: Are public and private forms of religious involvement independently associated with the severity of depression and hopelessness in older depressed individuals who are treated for depression in mental health setting when demographic and health status indicators are controlled?

METHODS

Participants

Data used in this analysis were obtained from a naturalistic longitudinal follow-up study conducted in our late-life depression center (P30 MH71944, CF Reynolds, PI). Data was collected by participant interviews performed by research staff. Longitudinal follow-up study participants were recruited from five treatment studies of non-psychotic depression. Treatment study participants were recruited from the geriatric inpatient units and outpatient clinics at the Western Psychiatric Institute and Clinic, Pittsburgh, PA.

One hundred and thirty out of 239 participants had complete religious involvement, demographic, health status indicator, hopelessness as well as depression severity data and were included in this analysis.

Assessment Measures

We established the diagnosis of major depression using the Structured Clinical Interview for DSM-IV.³ Depression severity was assessed via the Hamilton Rating Scale for Depression-17 item version.⁴

Severity of hopelessness was measured using the Beck Hopelessness Scale, a 20-item, a self-administered rating scale designed to measure negative expectancies of adults concerning themselves and their future life.⁵ Item responses are yes/no with higher scores indicating increased level of hopelessness.

Cognitive dysfunction was assessed using the Mini-Mental Status Examination.⁶ The MMSE is a 12-item cognitive mental status examination. Scores range from a maximum of 30 to zero.

General health status was assessed using the Cumulative Illness Rating Scale for Geriatrics count score.⁷ The CIRS-G is a physician-rated measure of pathology in major organ systems derived from a review of medical records (including the intake history, physical examination, and laboratory work-up) and interview data. The CIRS-G count score is a measure of the number and severity of organ system impairment. Higher count scores indicate more disease burden.

Frequency of Church attendance and frequency of prayer or meditation were each assessed with one item. The items are scored on a 1–6 scale with 1= never, 2= once a year, 3= a few times a year, 4= at least once a month, 5= at least once a week, or 6= nearly every day.⁸

Demographic, MMSE, CIRS-G count, and hopelessness data was obtained upon entry into the treatment studies. Depression severity and religious involvement data was obtained upon entry into the longitudinal follow-up study. Variability in participants' time in the treatment study prior to longitudinal follow-up study entry resulted in a 2–4 year retrieval time gap, with 64% of participants having a time difference of 2 years or less and maximal time difference of 4 years.

Statistical Analyses

We first assessed the association between the two religious involvement variables. We then conducted logistic regression analyses to evaluate the unique contribution of religious involvement to the prediction of dichotomous pre-treatment BHS scores (a score of 9 or greater indicating severe hopelessness) and post-treatment HRSD scores (a score of 7 or less indicating remission of depression), compared to the effects of demographic and health indicators; i.e., age, educational status, gender, general health status, and cognitive impairment.

RESULTS

Participant Characteristics

Twenty-nine participants scored 9 or above on the BHS and 41 participants' scored 7 or less on the HRSD. The mean age of participants was 71.9 years. Sixty-nine percent of participants were female and 90% Caucasian American, 9% African American and 1% other. At entry into the longitudinal follow-up study, mean HRSD score was 6.0, suggesting mild depressive symptoms. Mean pre-treatment BHS score was 5.7, suggesting mild to moderate hopelessness.

In terms of religious involvement, 92% of participants reported a religious affiliation with 60% of participants reporting attending church at least once a week (mode= 5) and 84% reporting privately praying or meditating at least every day (mode= 6).

Analyses

Spearman correlation analysis revealed significant associations between frequency of church attendance and prayer or meditation (Spearman $r=0.58$, $n=130$, $p<.0001$). Two multivariate models were then tested using logistic regression analysis; one using hopelessness severity and the other using depression severity as the outcome. Demographic and health status indicators

were first regressed unto each outcome (see Table 1, Model A). These analyses found that male gender was significantly associated with hopelessness (OR= 2.79 [1.03, 7.48], Wald chi square= 4.09, df=1, p=.043). Religious involvement variables were then entered into the models (see Table 1, Model B). These analyses found prayer was significantly associated with less hopelessness (OR= 0.58 [0.36, 0.94], Wald chi square= 4.97, df=1, p=.026) as well as reduced depression severity scores (OR=0.56 [0.36, 0.89], Wald chi square= 5.93, df=1, p=0.015).

Frequency of church attendance was not significant in either the hopelessness or depression models. To determine if we did not find a significant association between church attendance and depression/hopelessness because it was highly correlated with prayer/meditation, we re-performed the multivariate analyses, entering demographic and health indicators first followed by frequency of church attendance alone. These analyses also found church attendance was not significantly associated with depression (OR=0.914 [0.70, 1.189], Wald chi square=.45, df=1, p=.50) or hopelessness (OR=0.78 [0.58, 1.04], Wald chi square=2.88, df=1, p=.09).

DISCUSSION

We found frequency of prayer or meditation but not church attendance predicted lower hopelessness and depression severity scores in older adults treated for depression in mental health settings. "Our findings are consistent with studies on the influence of religion on depression and hopelessness in African American women⁹ and older, medically ill inpatients."¹⁰ We believe the study findings suggest prayer or meditation protects depressed individuals against severe depression and hopelessness. Alternative explanations for this finding could be: 1) the frequency of prayer or meditation decreases as individual's become more depressed and hopeless due to psychomotor retardation making it difficult to pray or meditate; or 2) when depressed and hopeless individuals' use of prayer or meditating as a coping behavior is unsuccessful, they may stop praying or meditating. We argue against these alternative explanations for two reasons: religion and prayer are dispositional, particularly among older persons. Older persons are unlikely to undergo major dispositional changes, even when confronting chronic disease. Thus, the alternative explanations are a possibility, but it is more likely that prayer or meditation is beneficial.

This study's findings are important in relationship to the ongoing public debate about the healing power of religion and religious involvement. The debate has centered on the potential curative and healing aspects of religious involvement. Sloan (2006) has questioned the strength of the data supporting the claim religious involvement has curative and healing properties.¹¹ Our study's findings suggest private activities are healing for they may enhance one's sense of well-being or belief in God and may be more important for older individuals being treated for depression in mental health settings than the social benefits derived from church attendance.

LIMITATIONS

First, the studies used for this analysis were not specifically developed to assess the relationship between religious involvement and depression and hopelessness severity. Second, hopelessness ratings and religious involvement scores were captured at different time points. We assumed that this older cohort of individuals' degree of religious involvement would not change substantially over time. However we may have been incorrect. Third, the cross-sectional nature of the study did not allow us to evaluate associations between religious involvement and variations in the severity of hopelessness in older individuals being treated for depression over time. Last, the generalizability of the study findings to other ethnic groups cannot be inferred for few non-majority Americans were in our study sample.

CONCLUSIONS

Our findings suggest religious involvement is protective through personal and meditative aspects as opposed to instrumental or social support aspects of religious involvement for older, depressed individuals treated in mental health settings. Prospective studies designed to test the protective effects of praying/meditating in this population are needed. Meanwhile, we recommend to mental health providers to obtain a brief spiritual history to learn how religion affects an individuals' coping with illness.

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Table 1

Multivariate analyses of the relationship between Religious Involvement items and dichotomous pre-treatment BHS scores (<9 and ≥9) and post treatment HRSD scores (≤7 and >7)

	Hopelessness ^{1,4} (logistic regression)		Depression ^{1,4} (logistic regression)	
	Model A ²	Model B ³	Model A ²	Model B ³
Age	0.97 [0.89,1.05] 0.46	0.97 [0.89,1.06] 0.50	0.99 [0.92,1.06] 0.76	0.99 [0.92,1.06] 0.72
Men	2.79 [1.03,7.48] 0.043	2.39 [0.84,6.76] 0.10	1.61 [0.66,3.91] 0.29	1.44 [0.57,3.63] 0.44
Education	0.91 [0.75,1.10] 0.34	0.84 [0.68,1.04] 0.11	0.97 [0.82,1.15] 0.72	0.90 [0.75,1.08] 0.25
MMSE	1.35 [0.98,1.85] 0.064	1.36 [0.97,1.89] 0.075	1.19 [0.93,1.53] 0.16	1.20 [0.93,1.54] 0.16
CIR Count	1.14 [0.92,1.41] 0.24	1.19 [0.94,1.50] 0.14	1.07 [0.89,1.28] 0.47	1.09 [0.90,1.32] 0.36
Church attendance	-	1.02 [0.70,1.48] 0.94	-	1.21 [0.85,1.72] 0.30
Prayer, meditation	-	0.58 [0.36,0.94] 0.026	-	0.56 [0.36,0.89] 0.015

¹ Logistic regression analysis: OR [95% CI] and p value are reported

² Only demographic items and clinical measures

³ Religiosity items added

⁴ P-values come from Wald chi square tests with df=1

Hopelessness: test of model B over model A, log-likelihood test, chi square =8.48, df=2, p<.02

Depression: test of model B over model A, log-likelihood test, chi square =7.34, df=2, p<.03