

BACKGROUND

- There is some evidence for a positive association between spirituality, cognitive, and behavioral functioning in people with Alzheimer's disease (AD).
 - New Haven Established Populations for Epidemiological Studies of the Elderly (n = 2,812) suggested that attendance at worship services was predictive of cognitive functioning over span of 3 years controlling for a number of sociodemographic and health related variables (Van Ness & Kasl, 2013).
 - Religious attendance associated with slower rate of decline on cognitive scores over 8 years in sample of people with Mexican origin (n = 3,065) aged 65 or older (Hill, Burdette, Angel, & Angel, 2006).
 - Findings from a study on people with AD (n = 68) suggested that higher levels of religiosity and private religious practices were associated with slower rate of decline on a brief cognitive measure over the span of 3 years ((Kaufman et al., 2007).
 - There was a slower rate of progression over 12 months on a cognitive screening measure and fewer behavioral and psychological symptoms of dementia (BPSD) in people with AD with high religious participation compared to those with low religious participation (Coin et al., 2010).

AIM

- The aim of this study was to gain insight into the relationship between spirituality/faith and symptoms of anxiety, depression, and behavioral functioning in people with mild AD. This study was part of a larger study on optimal health and well-being in people with AD and their family members

METHODS

Participants:

- 28 people with mild AD participated in the study (CDR=1).
- They were recruited from the Alzheimer's Disease and Memory Disorders Center at Baylor College of Medicine, Amazing Place Memory Care Center, Buckner Retirement Community, the Alzheimer's Association of North Texas, Interfaith Carepartners, and Sid Gerber and Associates.

Data Collection:

- After giving written consent, participants received a structured interview called the Dimensions of Living with Dementia (DLD) which is presented in another poster at this conference and quantitative measures specifically adapted for use with this population (see table for adaptations).

Analysis:

- Pearson's product moment correlations were calculated between measures of emotional and behavioral functioning and measures of spirituality/faith (see Table).

METHODS CONTINUED...

Adaptations to Measures for use with people with mild AD

All measures were administered by a trained examiner as opposed to being completed independently.

Each question was presented both verbally and visually to maximize comprehension.

A stimulus book with each item written in large font at the top of each page was utilized in order to minimize the need to rely on short-term memory.

Color coded response choices were placed below each item on the bottom of each page of the stimulus book to provide visual cues for response choices.

Participants asked to verbalize and point to answers (thus maximizing the likelihood that those with expressive language difficulties could complete the measures).

The number of response choices on the Likert scales for each measure were , which ranged from 3-9, was decreased to 3 for consistency.

FINDINGS

Zero-order Correlations for Measures of Spirituality and Emotional and Behavioral Functioning in people with mild AD

	GDS	GAI	NPIQF	NPIQS
RCOPE _{pos} -AD <i>n</i>	.00 22	-.08 18	.47 12	.42 12
RCOPE _{neg} -AD <i>n</i>	.37 [^] 22	.52* 18	.78** 12	.69* 12
Santa Clara-AD <i>n</i>	.06 22	.07 18	-.43 12	-.29 12
RPSS _{colab} -AD <i>n</i>	-.24 21	-.43 [^] 17	.50 11	.50 11
RPSS _{def} -AD <i>n</i>	-.01 21	-.28 17	.52 11	.42 11
RPSS _{self} -AD <i>n</i>	.41 [^] 21	.24 17	-.24 11	-.22 11

Note: Geriatric Scale (GDS); Geriatric Anxiety Inventory (GAI); Neuropsychiatric Inventory Frequency Subscale (NPIQF); Neuropsychiatric Severity Subscale (NPIQS); Brief Religious Coping Inventory Positive Subscale-Alzheimer's Disease (RCOPSPos-AD); Brief Religious Coping Inventory Negative Subscale-Alzheimer's Disease (RCOPSNeg-AD); The Santa Clara Strength of Religious Faith Questionnaire-Alzheimer's Disease (Santa Clara-AD); Religious Problem Solving Scale-Collaborative Subscale-AD (RPSScolab-AD); Religious Problem Solving Scale-Deferring Subscale-AD (RPSSdef-AD); Religious Problem Solving Scale-Self Directing Subscale-AD (RPSSself-AD).

**p < .01 level (2-tailed) * p < .05 level (2-tailed) ^ Non-significant trend

- The GAI, which assesses for symptoms of anxiety, was positively correlated with the negative religious coping scale of the Brief RCOPE-AD ($r[18] = .52, p = .03$).
- Frequency of behavioral and psychological symptoms of dementia (BPSD), as measured by the frequency subscale of the NPIQ, was highly correlated with the negative religious coping scale of the Brief RCOPE-AD ($r[12] = .78, p = .00$).

FINDINGS CONTINUED...

- There was as strong positive association between the severity subscale of the NPIQ and the negative religious coping scale of the Brief RCOPE-AD ($r[12] = .69, p = .01$).
- There was a positive but non-significant trend association for symptoms of depression, as measured by the GDS, and the negative religious coping scale of the Brief RCOPE-AD $r[22] = .37, p = ns$.
- There was also a positive but non-significant trend association between the GAI and the collaborative religious coping scale on the RPSS-AD ($r[17] = -.43, p = ns$).

DISCUSSION

- These findings suggest that people with mild AD may be similar to other populations dealing with medical difficulties in that the presence of spiritual struggle (as it pertains to the diagnosis) and mood go hand and hand.
- Feelings of abandonment by God/higher power and by one's faith community were the most frequently endorsed items suggesting spiritual struggle.
- Additionally, some individuals endorsed feeling that they had been inflicted with dementia as a punishment from God/higher power at least to some degree.
- Likewise, there was a strong positive relationship between the self-report measure of spiritual struggle and BPSD.

IMPLICATIONS

- Addressing the deep existential concerns of people with mild AD may lead to better behavioral and psychological outcomes.
- Better behavioral and psychological outcomes in persons with mild AD could lead to decreased burden, stress, and distress for family members and other caregivers and presumably reduce the need for psychotropic medication use in this vulnerable population.
- With disease progression, most people with AD experience an increase in behavioral and psychological symptoms (most predominantly during the mild to moderate shift). Additional research is needed to determine trajectories of spiritual coping and struggle as it relates to behavioral and psychological changes with disease progression.

LIMITATIONS

- Very small sample size, culturally and religiously homogenous sample, possible self-selection bias for participation in that only people interested in or comfortable with discussing spirituality and faith may have participated in the study.

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