Spirituality and Psychological Quality of Life in HIV+ Adults

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Abstract

Medical advances have lead to the extension of life for many people living with HIV/AIDS (PLH). As a result, Quality of Life (QOL) issues have moved to the forefront of HIV care. This study examined the relationship between spirituality (Ironson-Woods Spirituality/Religiosity Scale; Ironson, 2002) and psychological QOL (MOS-HIV; Wu, 1999). Psychological QOL is a concept which most people have an intuitive understanding of, but which continues to be difficult to define. For the purpose of this study, psychological QOL is a multi-dimensional concept that incorporates cognitive functioning, health distress, mental health, social functioning, and energy/fatigue (all scales from the MOS-HIV). We hypothesized that PLH who report higher levels of spirituality would report higher levels of psychological QOL along the five dimensions listed. This study included a diverse sample (N= 245, 48% female; 52.7% African Americans; 31.8% European American; 11% Latino; and 4.5% other ethnicity, 69.8% low income, age 20-68). After controlling for demographics, five exploratory hierarchical multiple regression analyses were conducted to evaluate factors associated with the total variance in the five psychological QOL dimensions listed. Our findings suggest that some PLH use spiritual beliefs to interpret the meaning of or perhaps appraise illness in such a way that it has a strong positive association with higher levels of psychological QOL.

Background

Psychological Distress is common in PLH

(Cohen et al., 2002; Doherty et al., 1994; Kalichman, Rompa, & Cagle, 2000)

Mood disorders are associated with:

- Poorer med adherence (Catz et al., 2000; Holzner et al., 1999) may → med failure (Liu et al., 2001)
- HIV-related symptoms (Cohen et al., 2002; Griffin & Rabkin, 1997; Kalichman & Catz, 2000)
- Faster disease progression (Ickovics et al., 2002; Ironson et al., 1994)

Stressors for PLH are associated with lower QOL

Social related symptoms: finances, lack of HIV-related information, lack of support, AIDS-related stigma (Heckman, Kochman, Sikken, & Kalichman, 1999)

Physical symptoms: night sweats, fatigue, opportunistic infections

Spirituality coupled in an integral manner with psychological wellbeing may enhance overall QOL

Belief in a higher purpose enables people who are terminally ill to find some benefit in negative life experiences (Lazarus & Folkman, 1984)

Spirituality is associated with psychological QOL in people living with terminal illness

(Daugherty et al., 2005; Laubmeier, Zatorski & Bair, 2004; Somlai & Heckman, 2000; Miller et al., 2005)

Hypotheses

- People living with HIV/AIDS who report higher levels of spirituality will report higher levels of psychological quality of life along the five dimensions of cognitive functioning, health distress, mental health, social functioning, and energy/fatigue.

SPIRITUALITY

Sense of Peace

Compassionate View of Others

Psychological Quality of Life

- Cognitive Functioning
- Health Distress
- Mental Health
- Social Functioning
- Energy/fatigue

Psychological Quality of Life

α

MOS-HIV psychological quality of life subscales (Albert Wu, 1996)

.93

"Were you afraid because of your health."
1=all of the time, 6=none of the time

Spirituality

Ironson-Woods Spirituality/Religiosity Index spirituality subscales (Ironson, Woods, 2002)

.97

"My beliefs give me a sense of peace."
1=strongly disagree to 5=strongly agree

Measures

Method

Participant Characteristics

Demographic and Medical Variable Summary

Variables	Mean	Standard Deviation	Range
Age	42	8.32	20-68
Education	12.12	2.58	1-22
Cd 4 Count	406.39	262.53	3-1500
Months Since Dx	84	60	1-276
Symptoms	7.44	5.65	0-20

Data Analyses

- All data were entered twice to control for data entry errors
- All data were analyzed using SPSS version 11.5 (SPSS, Inc., Chicago, IL)
- Standard procedures for assuring normality were performed
- Univariate & bivariate analyses were performed
- Exploratory hierarchical multiple regression analyses were conducted
- Multicollinearity statistics were performed

Correlation Matrix

Intercorrelations among variables	Scale	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Cog. Functioning		.66**														
Health Distress		.62**	.63**													
Mental Health		.51**	.52**	.48**												
Soc. Functioning		.47**	.52**	.67**	.42**											
Energy/Fatigue		.13*	.15*	.24**	.14*	.17**										
Spirituality		-.45**	-.48**	-.46**	-.47**	-.48**	.009									
Symptom Load		.1	.06	.08	.03	.04	.NS	.07								
HIV Meds		.53	.07	.1	.11	.1	.1	-.07	.NS							
Income		.08	.1	.13*	.NS	.NS	.06	.17**	.02	.12	.02					
Age		-.09	-.07	-.03	-.145*	.09	.17**	.07	-.18**	-.08	.1					
African Am.		.04	.03	.06	.03	.06	-.12	-.04	.12	.05	-.13	-.37				
Latino		.06	.06	-.01	.16*	-.12	-.11	-.04	.15*	.1	-.3	-.72**	-.24**			
European Am.		.04	-.02	.01	-.06	-.02	.01	-.01	-.09	-.1	.01	-.23**	-.08	-.15*		
Other Ethnicity		.01	.01	-.05	-.03	-.04	-.05	.08	-.04	-.15*	-.19**	.02	.NS	-.04	.03**	.03**
Sexual Orientation																

Note: *p<.05, **p<.01

Summary of Regression Analyses

Significant Predictor Variables	Criterion Variables		
Cognitive Functioning	β	t	p
Spirituality	.13	2.29	<.05
Symptom Load	-.46	-8.12	<.001
HIV Med Use	.12	2.09	<.05
Adj R ² = .22 F(9,235) = 8.84, p<.001			

Health Distress	
Spirituality	.12 1.99 <.05
Symptom Load	-.49 -8.76 <.001
Adj R ² = .27 F(9,235) = 9.79, p<.001	

Mental Health	
Spirituality	.23 4.05 <.001
Symptom Load	-.47 -8.47 <.001
Adj R ² = .27 F(9,235) = 11.12, p<.001	

Social Functioning	
Spirituality	.17 2.92 <.001
European Am.	.17 2.57 <.05
Symptom Load	-.47 -8.308 <.001
Adj R ² = .28 F(9,235) = 9.97, p<.001	

Energy/Fatigue	
Spirituality	.15 2.92 <.001
European Am.	-.15 2.57 <.05
Symptom Load	-.49 -8.308 <.001
Adj R ² = .28 F(9,235) = 9.97, p<.001	

Regression Model

Conclusions

Hypotheses Confirmed—After controlling for demographic and HIV-related variables, higher levels of spirituality were significantly positively associated with higher levels of psychological quality of life along the five dimensions of cognitive functioning, health distress, mental health, social functioning, and energy/fatigue.

Clinical Implications

Clinicians need to be aware that spirituality is strongly associated with psychological quality of life and that, when appropriate, must be addressed during treatment. Furthermore, if the spiritual nature of a patient is not recognized, the clinician may inadvertently do a disservice to the patient.

If future studies confirm our hypothesis that the relationship between spirituality and psychological quality of life is a causal one, interventions may target individuals who seem to lack a spiritual nature as a group at risk for a decreased quality of life as a result of their terminal illness. Treatment interventions with these at-risk patients may involve raising their awareness of the positive aspects of their life in order to increase their level of spirituality.

Limitations

- The correlational, cross-sectional design of this study limits any causal inferences.
- Possible unidentified variables could mediate/moderate these relationships.
- All data was collected via self-report measures, which introduced method error variance.
- Generalizability of our sample may be limited because we used a low-income convenience sample of PLH in the southern United States who utilize AIDS-service organizations
- Those who have higher income, do not seek services, or live in other regions may differ.

Future Research

- Longitudinal studies (to establish cause and effect relationships)
- Multiple modes of data collection
- Access to middle/high SES PLH
- Interventions

References

See Handout

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