

FACTORS ASSOCIATED WITH RESILIENCE AMONG OLDER PEOPLE LIVING WITH HIV

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Background

Due to advances in antiretroviral treatment and associated longer survival, the population of people living with HIV (PLWH) is aging.¹ In the United States, 45% of this population is aged 50 years or older and this percentage is climbing.² Resilience, which can be viewed as a measure of stress coping ability, is important in this population because it may help older PLWH to age successfully.³ However, little is known about resilience in older PLWH, and the factors that impact resilience.

Methods

Data collection

Data for this analysis were from the Aging with Dignity, Health, Optimism and Community (ADHOC) Study. ADHOC is an observational prospective, longitudinal cohort study that collects data on PLWH who are over age 50 using an online questionnaire from ten clinics across the U.S. The questionnaire includes information on sociodemographics, activities and interests, HIV diagnosis and status, health care use and satisfaction, antiretroviral therapy, comorbid medical conditions, health and well-being, substance use, and sexual practices. Where possible, validated patient-reported outcome (PRO) measures are used. Data for the present analysis were collected between October 2017 and May 2019.

Measuring resilience

Resilience was measured using the Connor-Davidson Resilience Scale 2 (CD-RISC 2).³ Scores ranged from 0 to 8, where higher scores indicated greater resilience.

Statistical Analysis

A cross-sectional analysis of ADHOC was performed on 1,051 older PLWH to determine associations between self-reported resilience and sociodemographic, health status, and clinical indicators. The impact of various factors on resilience was analyzed using bivariate analyses. Factors associated with resilience at $p < 0.20$ were included in a multiple linear regression model using backwards selection. Statistical significance was reached at two-tailed $p < 0.05$.

Results

Population characteristics

Of 1,051 participants, 896 (85%) were male and the mean age was 59 years (SD 6.1 years) (Table 1). Scores on the CD-RISC ranged from 0-8, with a mean of 6.35 (SD 1.49).

Association between resilience and various factors

Factors positively associated with resilience in the bivariate analyses included age, education level, current employment, income, being married or in a long-term relationship, number of close family and friends, and social support (all $p < 0.05$). In addition, years since HIV diagnosis, being male, and being gay were positively associated with resilience at the $p < 0.2$ level. Factors negatively associated with resilience included internalized stigma, depression, and anxiety (all $p < 0.05$).

Multivariable regression model

In the multivariable model, current employment and higher levels of social support were associated with greater resilience, whereas depression and anxiety were associated with lower resilience ($p < 0.05$) (Table 2). Higher income was marginally associated with greater resilience ($p = 0.06$).

Conclusions

To increase resilience, some factors identified in this study (e.g., socioeconomic status and employment) require community-wide interventions, while other factors (e.g., anxiety and depression) are potentially treatable by medical providers. All of these factors represent potential targets for interventions to increase resilience among older PLWH.

Disclosure: Jeff Berko, Peter Mazonson, and Theoren Loo have received research funding from ViiV Healthcare to develop ADHOC and collect data. Philip Grant has received research payments from ViiV healthcare. Andrew Zolopa, Frank Spinelli, and Duncan Short are employees of ViiV Healthcare.

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Table 1. Demographic characteristics of ADHOC participants (n = 1,051)

Characteristic	Number (%) of cases
Gender	
Male	896 (85)
Female	143 (14)
Transgender/Other	12 (1)
Age	
50-59	636 (61)
60-64	215 (20)
65+	199 (19)
Ethnicity	
White	727 (69)
Black	212 (20)
Hispanic/Latino	92 (9)
Sexual Orientation	
Gay or lesbian	788 (75)
Straight	182 (17)
Bisexual/other/do not wish to disclose	81 (8)
Relationship Status	
In a relationship	448 (43)
Single/divorced/widowed	603 (57)
Income	
Less than \$50,000	555 (57)
\$50,000 or more	415 (43)
Viral Load	
Undetectable	972 (94)
Detectable	59 (6)

Table 2. Multivariable regression results for factors significantly associated with resilience (adjusted R² = 0.25, $p < 0.001$)

Characteristic	β	(SE β)	p -value
Currently employed	0.22	0.10	0.03
Income level	0.04	0.03	0.06
Interpersonal support	0.37	0.09	< 0.01
Depression	-0.13	0.04	< 0.01
Anxiety	-0.18	0.04	< 0.01

