Loneliness and Stigma Impact Cognitive Function and Mental Health among HIV+ Older Adults in the Positive Brain Health Now (PBHN) Study

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Background

Loneliness and stigma are common experiences for older HIV+ adults. We sought to assess their impacts on cognition and emotional health.

Materials & Methods

PBHN is a prospective cohort of HIV+ adults aged ≥35 years. Participants were asked: "Do you find yourself feeling lonely: quite often, sometimes or almost never?" and "To what extent are you bothered by people blaming you for your HIV status?" Cognition was assessed using a computerized battery of cognitive tests (B-CAM) and the perceived deficit questionnaire (PDQ). Proportional odds regression and multiple linear regression were used to analyze associations between loneliness, stigma, and other outcomes, adjusting for age, sex and education. Structural equation modeling was used to estimate the relationships between stigma, cognition and mood. To avoid the confounding effects of gender and race, the stigma analysis was restricted to Caucasian men.

Results

Of 836 participants (85% men; mean age 52), 64% experienced loneliness "sometimes" or "quite often" (Table 1). Loneliness was associated with stigma, poorer cognitive ability, and poorer mental health.

Among 512 Caucasian men (mean age 54), 30% were bothered by HIV-related stigma. Stigma was associated with more cognitive symptoms, poorer cognition, and poorer mental health, especially anxiety.

Conclusions

The associations between loneliness, stigma, cognition, and mental health are complex. While this analysis cannot sort out "causal" relationships, the results support that HIV-related stigma and loneliness both have negative consequences for cognition and emotional health. Interventions to engage people in socially meaningful activities, and to reduce consequences of stigma, should be developed.

	How often do you find yourself feeling lonely?		
	Quite often	Sometimes	Never
N (%)	148 (17.7%)	383 (45.8%)	305 (36.5%)
% reporting stigma*	21.1%	13.4%	6.0%
B-CAM *	18.6	19.3	20.8
(0-40 best)			
PDQ *	44.0	35.5	27.6
(0-100 worst)			
RAND SF-36 *	47.6	64.8	79.4
Mental Health			
Inventory			
(0-100 best)			
HADS depression *	8.2	4.9	2.7
(0-14 worst)			
HADS anxiety *	10.8	7.6	4.8
(0-14 worst)			

Table 1: Distribution of Potential Contributors/Consequences to Loneliness Across Levels of Loneliness (N=836) (* P<0.001)