

Living with HIV: Exploring Aging and Health Outcomes in People with HIV as Part of the Positive Spaces, Healthy Places Study in Ontario



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BACKGROUND

The effectiveness of HAART is shown by an extraordinary decrease in mortality rate, improvement in HIV related quality of life (QOL) and increase in life expectancy. As a result, many people living with HIV/AIDS will age in coming years.

However, the interaction of aging with health outcomes in HIV is largely unexplored in Canada. Yet, it is a critical priority for long-term care and management for older people with HIV.

OBJECTIVES

To evaluate the health status of people living with HIV/AIDS (n=602) in the context of aging. We predicted that the interaction of aging with health status would be:

- significantly correlated between age and MOS-HIV Health Survey (MOS-HIV) on one or several items
- a gender difference in MOS-HIV, particularly that women will have significantly lower scores on one or a few items than men; and
- affected due to increasing age. Therefore other potential covariates as associated with age may contribute to the effects as well.

METHODS

As part of the ongoing CIHR-funded Positive Spaces, Healthy Places (PSHP), the MOS-HIV was the principal outcome measure for health status.

Variables of interest included socio-demographics, HIV disease markers, psychosocial and mental health status and MOS-HIV. Age groups were ranked in three groups: 20-39 (31%), 39-49 (47%) and 50+ (22%), respectively.

Data analyses were performed at different levels:

- univariate analyses and cross tabulates for all variables of interest, across age groups;
- comparing means of MOS-HIV stratified by sexes;
- a correlation matrix of selected items of MOS-HIV and age; and logistic regressions to evaluate the health status of people living with HIV/AIDS.

Potential covariate and interactions of these variables were tested. All analyses were performed in SAS for Windows 9.1 with data manipulation in SPSS 15.0.

RESULTS

Positive Spaces, Healthy Places (PSHP) study was conducted with 602 eligible participants. Mean (SD) age was 43.1 (8.6). One-quarter was female (25%).

Means (SD) of the Physical Health Summary (PHS) and Mental Health Summary (MHS) were 56.76 (10.77) and 45.61 (11.59), respectively. The current study PHS and MHS scores are lower than that of standardized Mean (SD) items.

Women vs. Men:

Mean (SD) scores of cognitive function, quality of life, ENERGY, health distress, and mental health summary, 39.1(13.7) vs. 42.0 (11.6); 41.7 (12.5) vs. 45.2 (12.2); 41.1 (10.8) vs. 44.1 (10.5); 43.7 (12.3) vs. 47.6 (11.9); and 43.0 (11.6) vs. 46.4 (11.4), respectively.

In contrast, significantly more men tested positive with HIV+ and were taking HAART for many more years than women, 12.0 (6.7) vs. 8.7 (5.5) and 8.2 (5.6) vs. 6.0 (4.7), respectively.

Table 1. Correlation matrix: Age, AUDIT, DAST and selective items of MOS-HIV Health Survey

Variables	1	2	3	4	5	6	7	8	9
Age (year)	-	-.12**	-.22**	-.20**	-.11**	-.09*	-.22**	-.16**	-.12**
General health		-	.48**	.52**	.53**	.51**	.72**	-.10*	-.17**
Physical functioning			-	.46**	.52**	.45**	.80**	.02	-.03
Role functioning				-	.37**	.45**	.73**	-.01	-.08*
Bodily pain					-	.48**	.76**	-.05	-.15**
Social functioning						-	.74**	-.05	-.06
Physical health summary							-	-.20	-.10*
AUDIT ^a								-	.32**
DAST ^b									-

a. Alcohol Use Disorders Identification Test; b. Drug Abuse Screening Test

Table 1 shows that several significant correlations were found with age, such as physical health summary, physical functioning, role functioning, bodily pain and social functioning.

Table 2. Predictors for poor physical health summary (score <57) of people living with HIV/AIDS in PSHP (n=428)

Variable	OR(CI95%)	Adjusted OR(CI95%)
Age ≥50 years	2.25(1.39,3.64)***	1.96(1.13,3.41)*
Depression score ≥20	6.49(4.24,9.95)***	7.13(4.53,11.24)***
Caucasian Canadians	2.17(1.36,3.47)***	1.75(1.02,3.01)*
No HIV specialist service for last 3 months	2.38(1.36,4.17)**	2.12(1.12,4.03)*
On HAART regimen ≥12 years	2.88(1.73,4.80)***	3.04(1.71,5.42)***

*** P < .001, ** P < .01, * P < .05

Table 2 shows age ≥ 50 years, depression (score ≥ 20), and time on HAART regimen (≥ 12 years) are the selected predictors for poor physical health summary (score < 57).

DISCUSSION

- In Positive Spaces, Healthy Places study, the overall mean (SD) items of MOS-HIV were lower than adjusted cut off value. Analysis also showed that physical health quality of life was correlated with age; there were significant relationships between age and general health perception, physical, social, role functioning, pain and the physical health summary (PHS)
- Significantly poorer PHS scores were associated with old age, depression, being Caucasian, having no HIV specialist service in last three months, and being on HAART regimen ≥ 12 years
- Despite the fact that less women had tested HIV +ve and were on HAART fewer years than men, women experienced significantly lower scores than men in cognitive functioning, QOL, ENERGY, health distress and mental health summary (MHS)
- The PSHP study demonstrated the need for comprehensive intervention and support programs to address these multiple factors affecting the quality of life of people living with HIV/AIDS

LIMITATIONS

There were no correlations between age and CES-D, cognitive functioning, QOL, ENERGY as well as health distress. Lack of other health outcomes information (i.e. co-morbidities) was also a limitation.

Although an extra effort was made to include all groups affected by HIV/AIDS, the study sample may not be representative of all persons living with HIV/AIDS in the province. There is also a chance of recall biases.

CONCLUSION

The overall health in people with HIV was affected by a combination of factors, including age, gender, mental health status, access to care, and potential effects (i.e. side effects of HAART).

Significant work remains to understand the complexities of aging with HIV and what treatments and interventions are needed to maximize health outcomes for people with HIV.

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Partners

