

Evaluating Healthy Aging Among Canadian HIV-positive Older Adults in the CHANGE-HIV Cohort

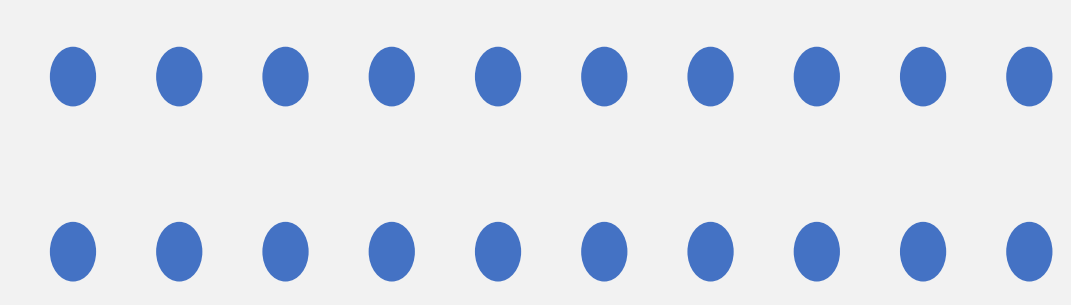


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Background

- Life expectancy among people living with HIV (PLWH) is approaching that of the general population.
- PLWH continue to experience greater burden and earlier onset of medical comorbidities, especially among those who initiated treatment at lower CD4 counts.
- Important differences in clinical outcomes and quality of life persist.
- Examining healthy aging as a **multidimensional state** can guide development of preventative and management strategies that are appropriate for the complex social and healthcare needs of people aging with HIV.



Methods

- The CHANGE HIV (Correlates of Healthy Aging in GERiatric HIV) study is a Canadian cohort of PLWH age ≥ 65
- In this cohort, healthy aging is assessed across 7 domains of health using the Rotterdam Healthy Aging Score (HAS)
- HAS scores for the first 216 participants were compared according to gender and other sociodemographic and HIV-related factors using Kruskal-Wallis and Fisher's exact tests for comparisons

Table 1. Rotterdam Healthy Aging Score

Domains of Health	Measurement Tool	Score	
Quality of Life	Life Satisfaction Questionnaire	0 Low 1 Moderate 2 High	Low QoL on 5-8 items Low QoL on 1-4 items High QoL on all 8 items
Social Support	Questionnaire	0 Low 1 Moderate 2 High	“Agree” with 0-2 statements “Agree” with 3-4 statements “Agree” with all 5 statements
Pain	Self-rate	0 Low 1 Moderate 2 High	Very severe pain for ≥ 1 activity Everything in between No or mild pain for all activities
Physical Function	Basic Activities of Daily Living (bADL)	0 Low 1 Moderate 2 High	Severe disability on bADL or iADL Everything in between
	Instrumental Activities of Daily Living (iADL)		Mild disability on bADL and iADL
Cognitive function	Mini Mental State Examination (MMSE)	0 Low 1 Moderate 2 High	Score of 0 to 20 Score of 21 to 25 Score of 26 to 30
Mental Health	Center for Epidemiologic Studies Depression Scale (CES-D)	0 Low 1 Moderate 2 High	Score of 23 to 60 Score of 17 to 22 Score of 0 to 16
Chronic Disease	Number of Chronic Diseases	0 Low 1 Moderate 2 High	>1 disease “multimorbidity” 1 disease 0 diseases

- ▷ Healthy aging scores (HAS 13-14)
- ▷ Intermediate aging scores (HAS 11-12)
- ▷ Poor aging scores (HAS 0-10)

Results

- Among 216 participants, median (IQR) age was 71 (68-74), 90% were men, 9% women and 1% transgender.
- Majority of participants were white (78%), born in Canada (65%) and retired (77%).
- Median (IQR) HAS was 12 (10-13).
 - ▷ Women and transgender participants were more likely to have poor aging scores, compared to men ($p < 0.05$).
 - ▷ Women had fewer comorbidities compared to men, but worse cognitive function scores and more pain ($p < 0.05$).
- HAS scores did not differ by age ($p = 0.691$), race ($p = 0.510$) or CD4 count nadir ($p = 0.535$), but participants with longer duration of HIV infection had lower HAS scores ($p = 0.043$).

Figure 1. HAS distribution in the CHANGE HIV cohort

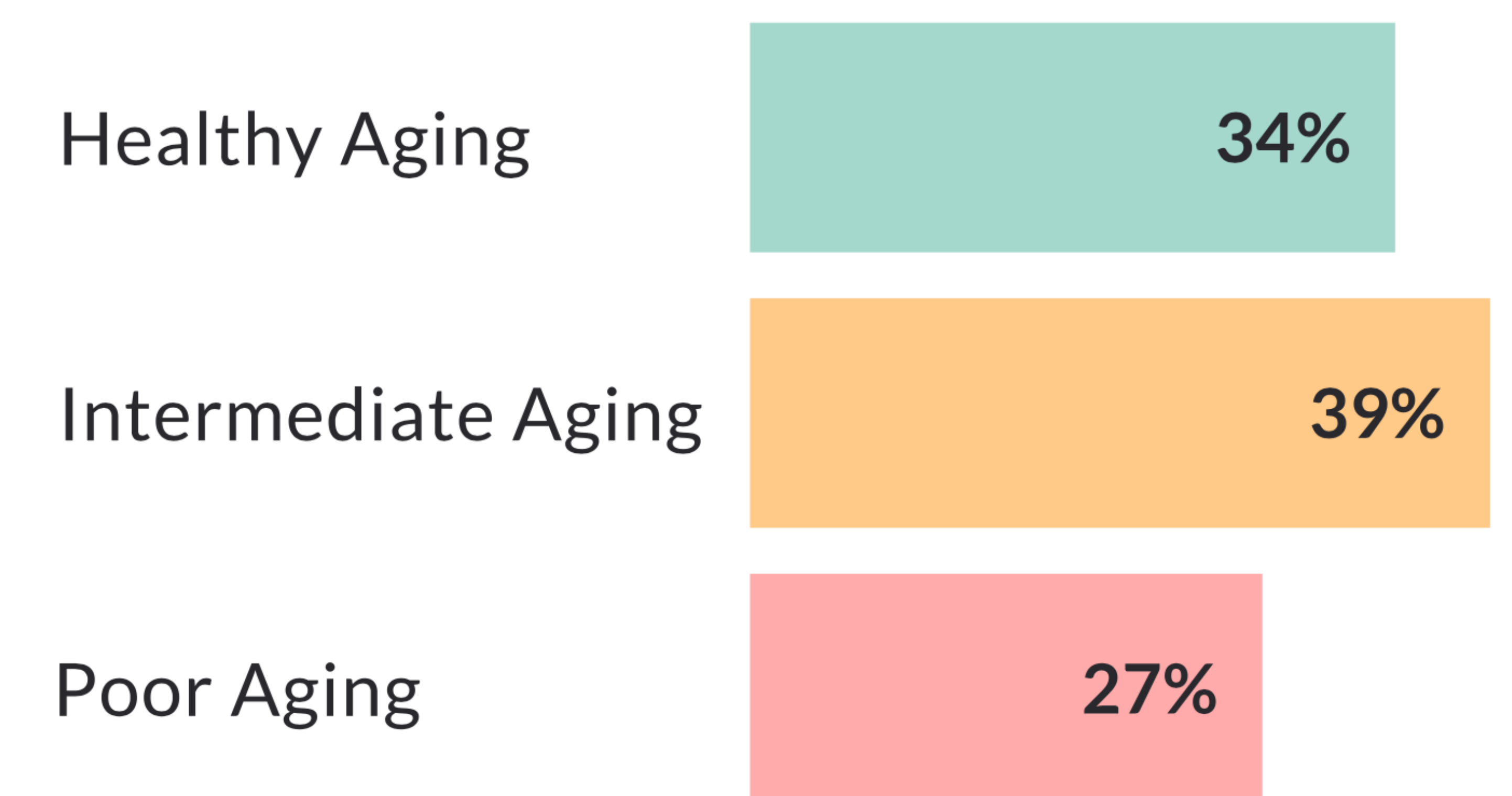
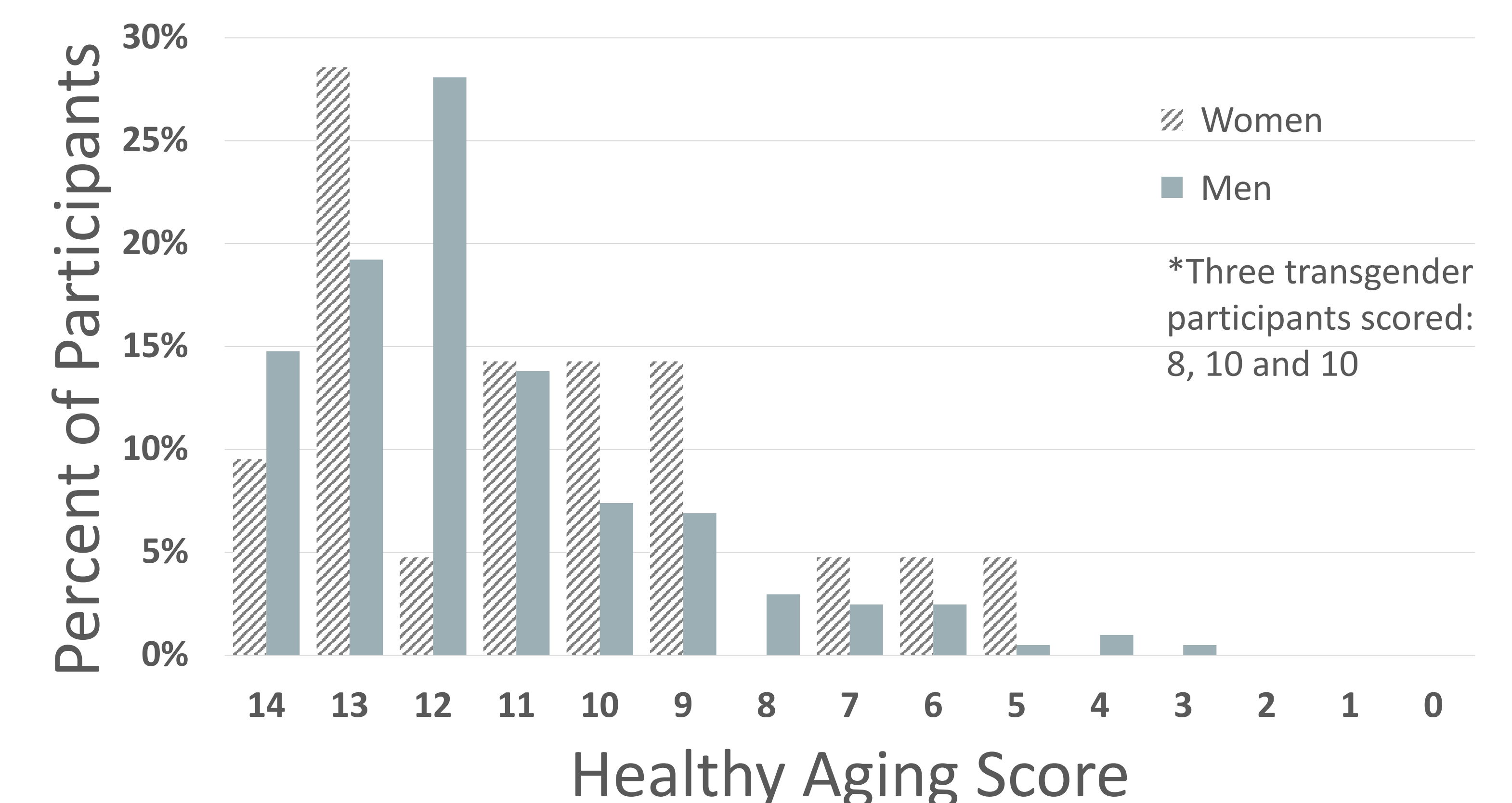
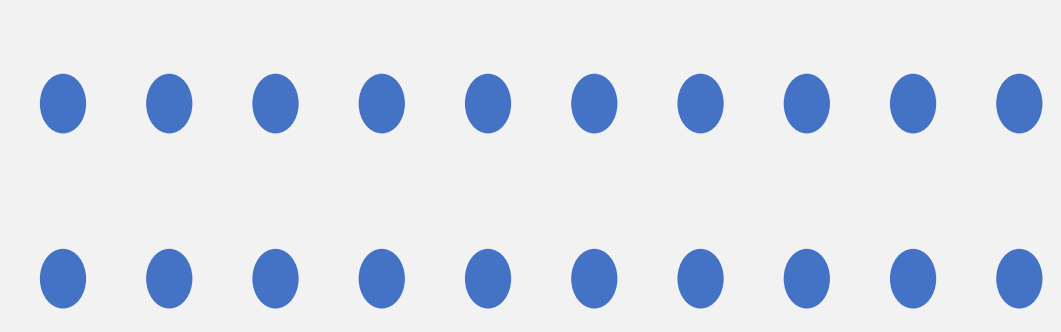


Figure 2. Gender differences in HAS distribution





Conclusions

- Gender seems to have an important impact on the aging experience of PLWH, especially across comorbidity, cognitive function and pain domains of health.
- Longer duration of HIV infection is associated with poorer aging scores.
- Using a multidimensional score like the HAS can identify individuals at risk of poor clinical outcomes and direct interventions that support healthy aging.