

Clinical and Sociodemographic Characteristics Associated With Poor Self-rated Health Across Multiple Domains Among Older North American Adults Living With HIV

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Key Takeaways

- Among older adults (aged ≥50 years) living with HIV (OALHIV) in North America, approximately three-quarters reported suboptimal health on at least one domain
- Mental health disorders, anemia, bone disease, insomnia, and substance abuse were the greatest indicators of OALHIV reporting suboptimal health on all domains compared with those reporting optimal health

Introduction

- The UNAIDS 95-95-95 strategy to help end the HIV epidemic includes the following targets¹:
 - Diagnosis: 95% of those with HIV will know their status
 - Treatment: 95% of those diagnosed will be on antiretroviral therapy (ART)
 - Viral suppression: 95% of those on ART will be virologically suppressed
- In addition to the UNAIDS targets, a fourth target focusing on quality of life has been proposed: 90% of virologically suppressed people living with HIV (PLHIV) will have good health-related quality of life²
- The World Health Organization definition of health is aligned with the idea that treating PLHIV goes beyond virologic suppression³

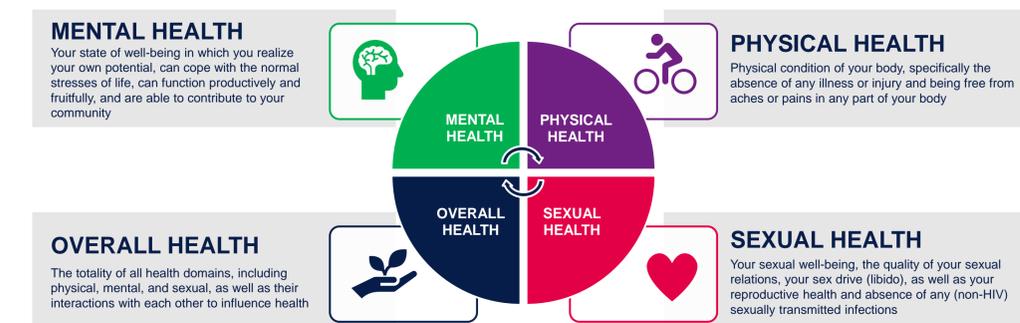
“Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.” – World Health Organization

- This is particularly important in older adults as comorbidities and polypharmacy increase with age^{4,5}; furthermore, OALHIV represent a growing demographic in North America^{6,7}
- In this study, we used a large patient survey to summarize baseline characteristics and associated self-reported suboptimal health in North American OALHIV

Methods

- Positive Perspectives was a comprehensive survey conducted from April to August 2019 in 25 countries to assess the lifestyles and challenges of PLHIV, including self-reported health and comorbidities⁸
- OALHIV aged ≥50 years (born in or before 1969) from the United States, Canada, and Mexico were included in this analysis (N=161)
- Self-reported health was assessed across 4 domains (physical, mental, sexual, and overall; Figure 1) and each was dichotomized as optimal (Good/Very good) or suboptimal (Neither good nor poor/Poor/Very poor)

Figure 1. Health Domains Evaluated



- Multinomial logistic regression was measured for associations between domains and relevant sociodemographic and clinical characteristics
- Comorbidities and polypharmacy were self-reported by participants based on the following questions:
 - “Please select which medical conditions below you have ever been diagnosed with by a doctor or other healthcare professional”
 - “Please select the medical conditions below for which you are currently taking a medicine. This can be a prescription or non-prescription medicine, and can be for treating the condition itself or a symptom of that condition”

Results

Participants

- Of 583 participants from North America, 161 were aged ≥50 years and included in this analysis (Table 1)

Table 1. Baseline Demographics by Country and Overall

Parameter	Canada (N=24)	Mexico (N=15)	United States (N=122)	Total (N=161)
Sex, male, n (%)	21 (88)	12 (80)	85 (70)	118 (73)
Aged ≥65 y, n (%)	6 (25)	1 (7)	16 (13)	23 (14)
HIV diagnosis ≥10 y before survey, n (%) ^a	20 (83)	11 (73)	89 (73)	120 (75)
Time since diagnosis, median (range), y	21 (4-39)	14 (1-25)	20 (0-37)	20 (0-39)
Number of daily non-HIV medicines, n (%) ^b				
≥1	18 (75)	9 (60)	91 (75)	118 (73)
≥3	10 (42)	2 (13)	41 (34)	53 (33)
≥5	3 (13)	1 (7)	13 (11)	17 (11)
Number of ART switches, n (%)				
≥1	22 (92)	11 (73)	95 (78)	128 (80)
≥4 ^c	9 (38)	4 (27)	60 (49)	73 (45)
Reason for switching, n (%) ^d				
Reduce severity or frequency of side effects	11 (46)	5 (33)	39 (32)	55 (34)
Reduce number of pills	7 (29)	4 (27)	34 (28)	45 (28)
Resistance/No longer effective	3 (13)	2 (13)	23 (19)	28 (17)
Reduce number of medicines	6 (25)	1 (7)	18 (15)	25 (16)
Potential drug-drug interactions	4 (17)	0	14 (11)	18 (11)

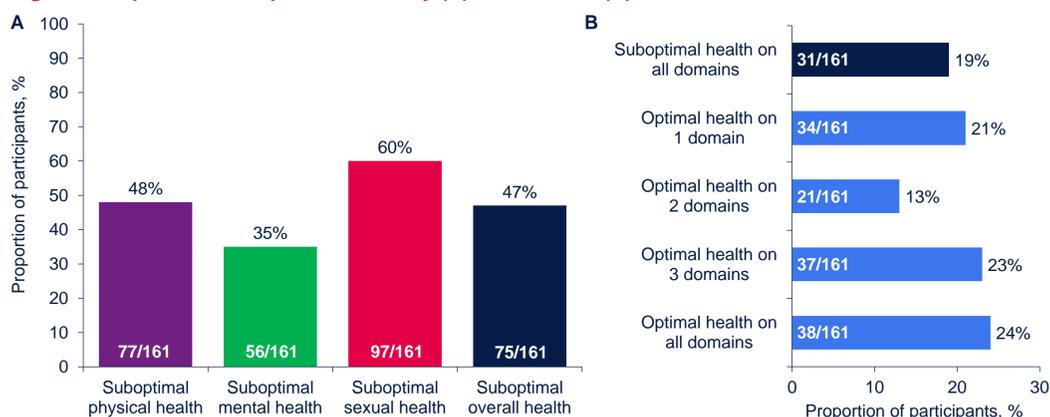
^aSurvey was conducted in 2019. ^bIncluded prescription and non-prescription medicines that could be used to treat a condition or a symptom of a condition. ^cWith ≥1 switch in the past year for resistance or poor tolerability. ^dReported by ≥15% of survey respondents.

- All participants were currently taking ART
- 100% of participants aged ≥50 years reported ≥1 comorbidity; the most common were hypertension (42%), hypercholesterolemia (39%), mental health disorders (32%; including anxiety, depression, bipolar disorder, and schizophrenia), insomnia (29%), arthritis (27%), and gastrointestinal disease (23%)
 - 86% and 66% of participants had ≥2 and ≥3 comorbidities, respectively

Suboptimal Health

- Overall, 76% of OALHIV reported experiencing suboptimal health on ≥1 domain (Figure 2)

Figure 2. Reports of Suboptimal Health by (A) Domain and (B) Number of Domains



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Suboptimal Health and Comorbidities

- 90% of participants reporting suboptimal health on all domains had ≥2 comorbidities, with mental health disorders (48%), hypercholesterolemia (48%), and hypertension (48%) being the most prevalent
- Some comorbidities, including mental health disorders, bone disease, and insomnia, had a >10% difference in prevalence between OALHIV reporting suboptimal and optimal health (Table 2)

Table 2. Comorbidities With a >10% Difference Between OALHIV Reporting Suboptimal and Optimal Health

Comorbidity, n (%)	Suboptimal health on all domains (N=31)	Optimal health on all domains (N=38)	Optimal health on ≥1 domain (N=130)
Mental health disorder	15 (48)	8 (21)	36 (28)
Anemia	6 (19)	0	10 (8)
Bone disease	8 (26)	1 (3)	11 (8)
Gastrointestinal disease	10 (32)	4 (11)	27 (21)
Hypercholesterolemia	15 (48)	7 (18)	47 (36)
Insomnia	13 (42)	5 (13)	33 (25)
Substance abuse ^a	8 (26)	2 (5)	7 (5)

^aAs self-reported in the survey; included alcohol and drugs.

- Certain comorbidities were more likely to lead to suboptimal health on specific domains (Table 3)
 - 95% and 89% of OALHIV with bone disease had suboptimal sexual health and suboptimal overall health, respectively
 - 61% and 65% of OALHIV with mental health disorders had suboptimal physical health and suboptimal sexual health, respectively

Table 3. Suboptimal Health Across Domains in OALHIV by Comorbidity

Health status, n (%)	Mental health disorder (N=51)	Anemia (N=16)	Bone disease (N=19)	Gastrointestinal disease (N=37)	Hypercholesterolemia (N=62)	Insomnia (N=46)	Substance abuse (N=15) ^a
Suboptimal physical health (n=77)	31 (61)	10 (63)	13 (68)	23 (62)	34 (55)	24 (52)	12 (80)
Suboptimal mental health (n=56)	11 (22)	8 (50)	5 (26)	6 (16)	8 (13)	11 (24)	6 (40)
Suboptimal sexual health (n=97)	33 (65)	11 (69)	18 (95)	25 (68)	39 (63)	31 (67)	11 (73)
Suboptimal overall health (n=75)	29 (57)	9 (56)	17 (89)	23 (62)	33 (53)	30 (65)	11 (73)

^aAs self-reported in the survey; included alcohol and drugs.

Conclusions

- All OALHIV in North America reported comorbidities and most reported polypharmacy, with approximately one-fifth reporting suboptimal health on all domains and three-quarters reporting suboptimal health on at least one domain
- Care for OALHIV requires improved models that ensure the broader impacts of HIV are better managed
- Quality communication is needed to identify poor mental health to enable more effective management of mental health disorders, which may impact QoL

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