

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

Megan Dominguez,¹ Chinyere Okoli,² Patricia de los Rios,³ Manyu Prakash,² Andrew Clark²

¹ViiV Healthcare, Durham, NC, USA; ²ViiV Healthcare, Brentford, UK; ³ViiV Healthcare, Montreal, QC, Canada

Presenting author:
Megan Dominguez
410 Blackwell Street, Suite 300
Durham, NC, USA 27701
megan.x.dominguez@viiivhealthcare.com
Phone: 201-220-8444



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

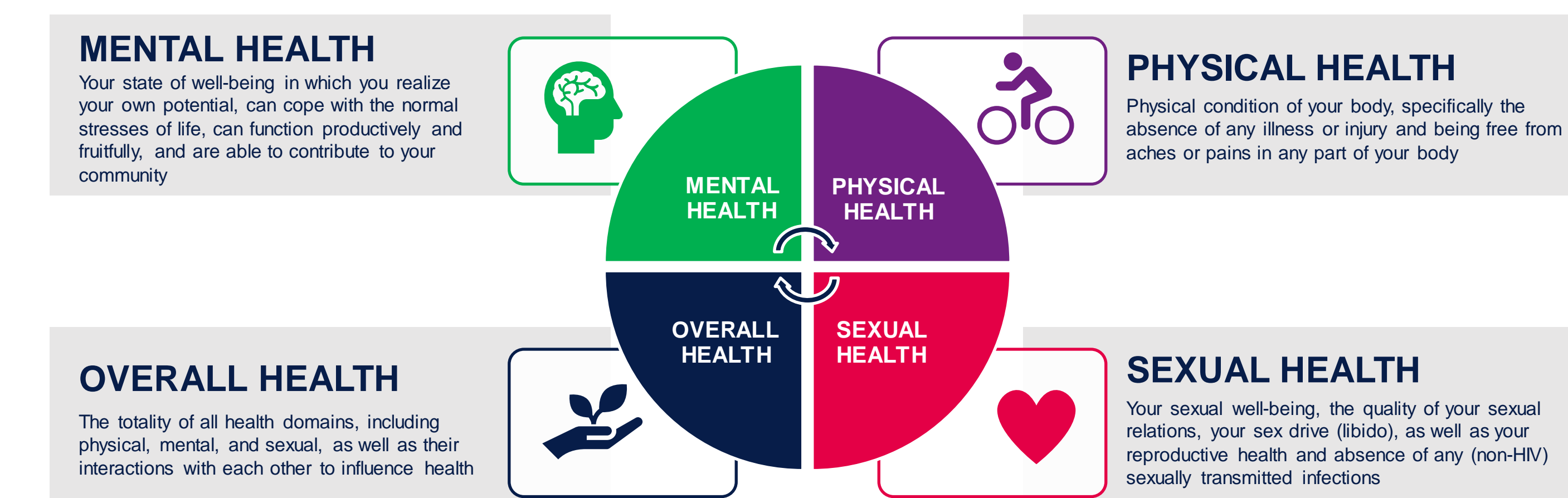
“Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.” – World Health Organization

- 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)

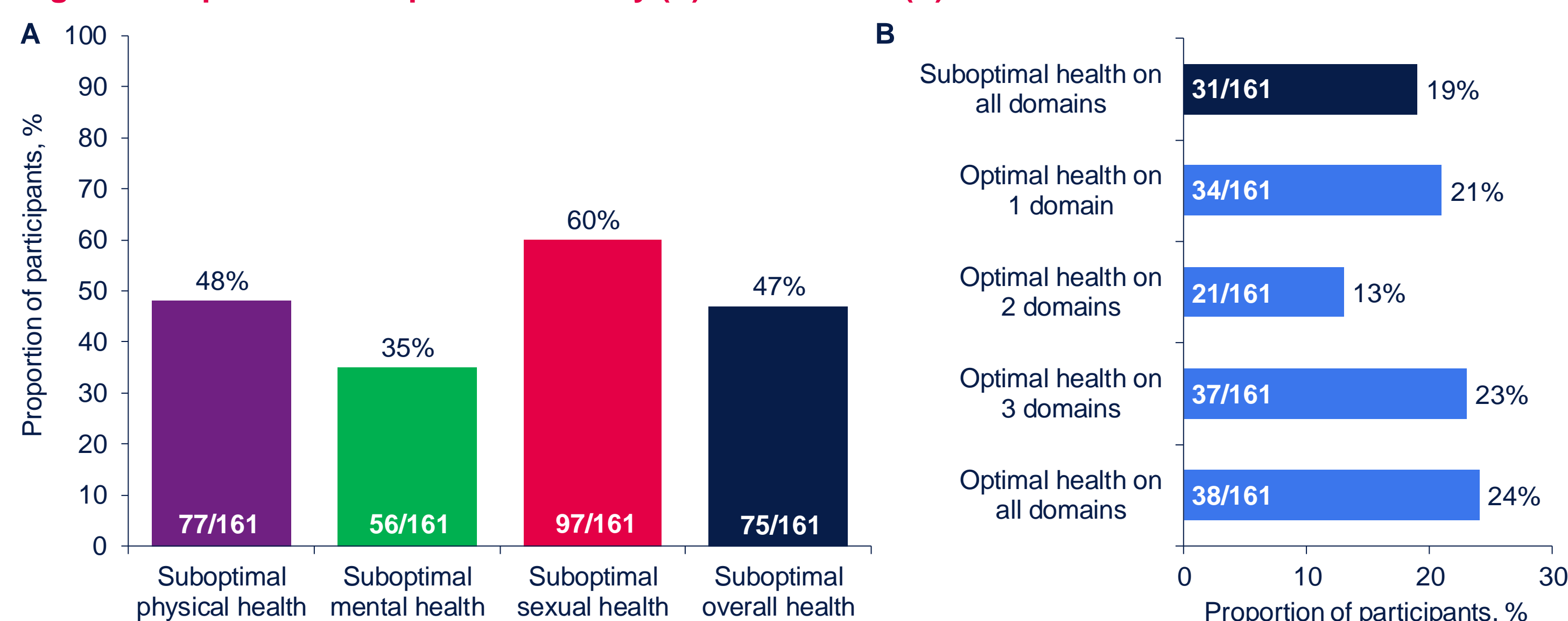
^aSurvey was conducted in 2019. ^bIncluded prescription and non-prescription medicines that could be used to treat a condition or a symptom of a condition. ^cWith ≥1 switch in the past year for resistance or poor tolerability. ^dReported by ≥15% of survey respondents.

- 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



Acknowledgments: This study was funded by ViiV Healthcare. We thank everyone who has contributed to the success of this study, including all study participants and their families and the ViiV Healthcare study team. Editorial assistance and graphic design support for this poster were provided under the direction of the authors by MedThink SciCom and funded by ViiV Healthcare.

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

References: 1. UNAIDS. https://www.unaids.org/sites/default/files/media_asset/201506_JC2743_Understanding_FastTrack_en.pdf. Accessed September 28, 2022. 2. Lazarus et al. *BMC Med.* 2016;14:94. 3. World Health Organization. <https://www.who.int/about/governance/constitution>. Accessed September 1, 2022. 4. Althoff et al. *Curr Open HIV Res.* 2016;11:527-536. 5. Roomaney et al. *Int J Environ Res Public Health.* 2022;19:2359. 6. Wing. *Trans Am Clin Climatol Assoc.* 2017;128:131-144. 7. NIH. <https://www.nia.nih.gov/health/hiv-aids-and-older-adults>. Accessed September 7, 2022. 8. Okoli et al. *Prev Chronic Dis.* 2020;17:E22.

This content was acquired following an unsolicited medical information enquiry by a healthcare professional. Always consult the product information for your country, before prescribing a ViiV medicine. ViiV does not recommend the use of our medicines outside the terms of their licence. In some cases, the scientific Information requested and downloaded may relate to the use of our medicine(s) outside of their license.