

# BEYOND VIRAL LOAD: EXPLORING MEDIATING FACTORS FOR THE GAP IN OPTIMAL SELF-RATED HEALTH BY ADHERENCE STATUS AMONG OLDER ADULTS LIVING WITH HIV

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## Introduction

- In the United States, 48% of people with HIV are aged ≥50 years, putting them at greater risk of comorbidities and social stigma<sup>1</sup>
- Attaining and maintaining optimal overall health among older adults living with HIV (OALWH) requires more than virologic control and includes prioritization of physical, mental, and social well-being<sup>2,3</sup>
- There is increasing focus upon ensuring a good health-related quality of life for people living with HIV<sup>4</sup>
- Herein we examine the factors that explain the differences in self-rated overall health between optimally vs suboptimally adherent OALWH

## Methods

### Survey Measure, Definitions, and Statistics

- Data were analyzed for the 699 OALWH aged ≥50 years from the 25-country Positive Perspectives 2 survey conducted in 2019
- Suboptimal adherence was defined as having missed ≥5 ART doses during the past month for any reason
- Optimal self-rated overall health was classified as “Good”/“Very good” (vs “Neither good nor poor”/“Poor”/“Very poor”)
- Blinder-Oaxaca decomposition analyses examined factors accounting for gaps in optimal overall health by adherence status, adjusting for region

## Results

### Participants

- Overall, 16% (114/699) of OALWH were suboptimally adherent compared with 27% (461/1690) of participants aged <50 years
- Median age and time of commute to HIV care provider were similar among optimally and suboptimally adherent participants; however, a higher proportion of women and a lower proportion of white participants were suboptimally adherent (Table 1)

**Table 1. Adherence: Demographics and Baseline Characteristics**

Parameter	Participants aged ≥50 years	
	Optimally adherent (N=585)	Suboptimally adherent (N=114) <sup>a</sup>
Age, median (range), y	56 (50-75)	55 (50-86)
Female, n (%) <sup>b</sup>	163 (28)	47 (41)
White, n (%)	369 (63)	44 (39)
<1 h commute to HIV care provider, n (%)	486 (83)	96 (84)
Undetectable or suppressed viral load, n (%)	525 (90)	89 (78)

<sup>a</sup>Suboptimal adherence was defined as having missed ≥5 ART doses during the past month for any reason. <sup>b</sup>Includes transgender women; data for non-binary participants (optimally adherent: n=5 [1%]; suboptimally adherent: n=1 [1%]) also reported.

### Differences in Self-rated Overall Health and Understanding of ART

- Optimally adherent participants were more likely to experience optimal overall health (57%, 331/585) vs suboptimally adherent participants (40%, 46/114;  $P<0.001$ ), a gap of 17 percentage points
- The differential effects of optimal vs suboptimal adherence on optimal overall health were primarily explained by side effects or perceived limitations from HIV or HIV treatment (35%), differences in comorbidities (27%), and differences in viral load (6%)
- 66% of suboptimally adherent participants (75/114) felt that they understood enough about their HIV treatment (Table 2)

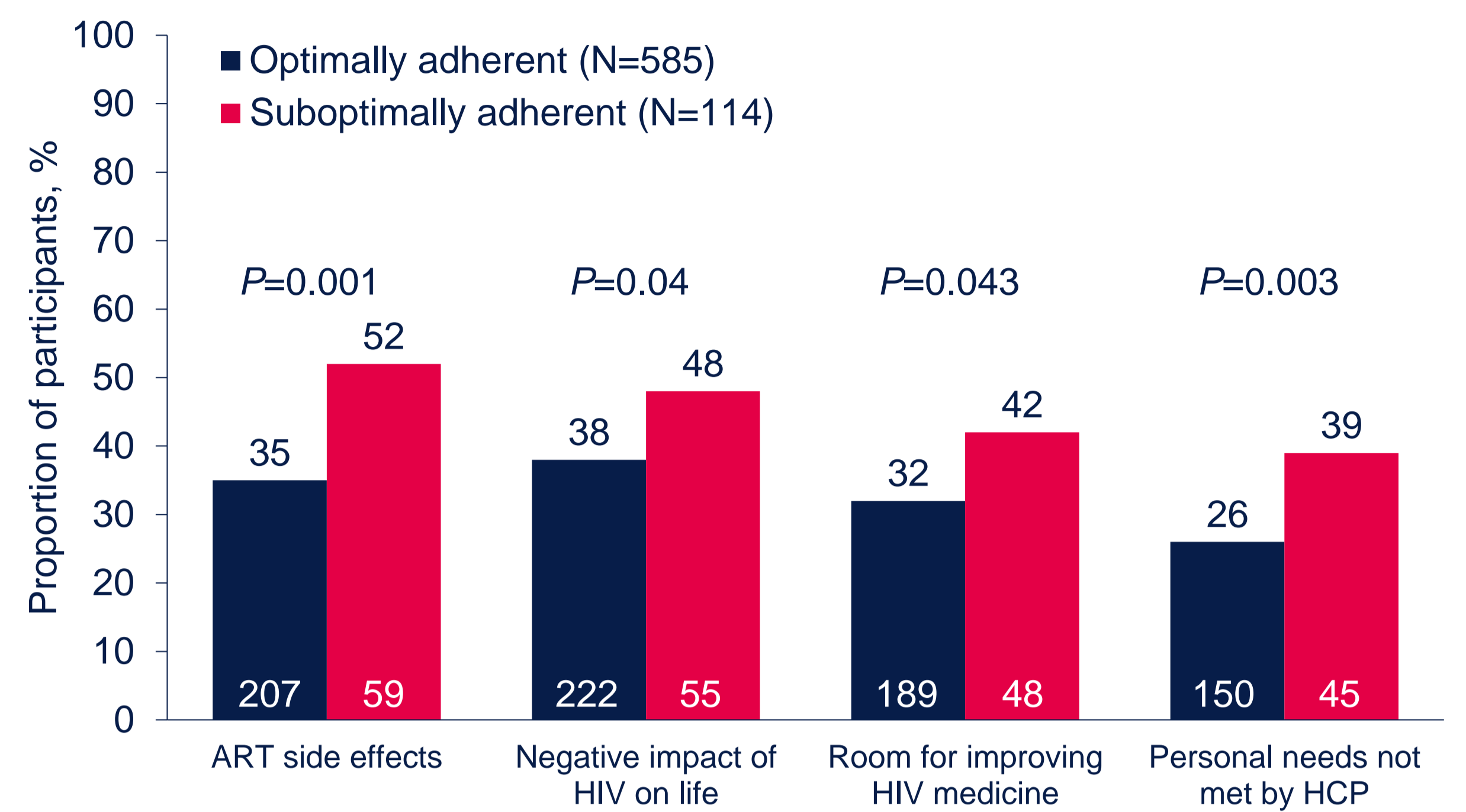
**Table 2. Participant Understanding of ART by Adherence Status**

n (%)	Optimally adherent (N=585)	Suboptimally adherent (N=114)
Understands ART	468 (80)	75 (66)
Does not understand ART	117 (20)	39 (34)

### Impact of HIV and ART on Quality of Life

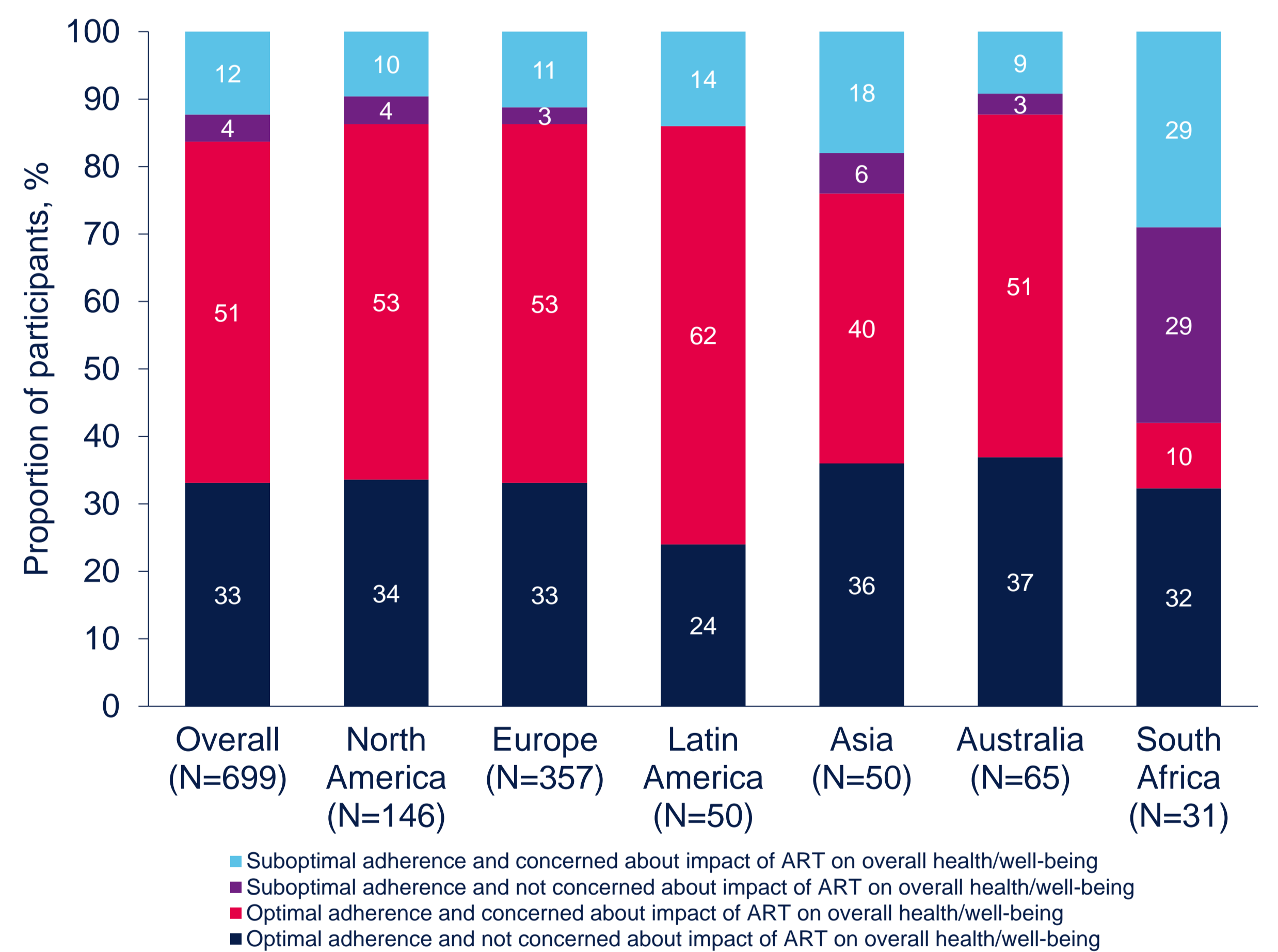
- Suboptimally adherent individuals were more likely than optimally adherent individuals to report side effects from ART, negative impact of HIV on their lives, room for improving HIV medication, and personal needs not being met by HCPs (Figure 1)

**Figure 1. Impact of ART and HIV by Adherence Status**



- More suboptimally adherent participants tended to agree that HIV would reduce their lifespan (51% [58/114]) compared with optimally adherent participants (38% [221/585])
- 75% (86/114) of suboptimally adherent participants and 61% (354/585) of optimally adherent participants were worried about the potential impacts of ART on their overall health and well-being
- Regional differences in concerns about ART impact on overall health were observed (Figure 2)

**Figure 2. Concerns About ART on Overall Health and Well-being by Adherence Status and Geographic Region**



Regions were North America (United States and Canada); Europe (Austria, Belgium, France, Germany, Italy, Netherlands, Poland, Portugal, Ireland, Russia, Spain, Switzerland, and United Kingdom); Latin America (Argentina, Brazil, Chile, and Mexico); and Asia (China, Japan, South Korea, and Taiwan). Australia and South Africa were analyzed separately. Some columns may not add up to 100% because of rounding.

- Among all OALWH with concerns about the long-term impact of ART on their overall health, those with self-rated suboptimal health were significantly more likely to have switched ART in the past year vs those with self-rated optimal health (22% [59/270] vs 13% [35/262];  $P=0.010$ )

## Conclusions

- ART adherence is associated with better perceived overall health
- Differences among OALWH in overall health by adherence status were mainly attributable to challenges with ART and comorbidities
- Regional differences among OALWH were observed in ART adherence and perception of overall health
- Holistic care that considers the medical and emotional challenges faced by OALWH can potentially improve overall well-being

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