ViiV Healthcare

POLYPHARMACY

IMPACT OF POLYPHARMACY IN PEOPLE WITH HIV

> “By actively assessing patients holistically and considering how increased medication may influence individual behavior to health outcomes, clinicians may contribute to improving health-related quality of life among people living with HIV.”

Okoli C *et al.* 2020[1]
ViiV Healthcare employee

Developments in antiretroviral therapies (ART) mean people with HIV are leading longer lives than ever before.[2,3]

Evidence suggests that people with HIV are at **higher risk of developing comorbidities at a given age** compared to the general population and **polypharmacy may result**.[1,4]

Polypharmacy is generally understood to be the **concurrent use of multiple medications**—commonly defined as taking 5 or more.[4,5] **The increased medication complexity it creates can have consequences for care**, including potential drug-drug interactions, and the risk of adverse reactions from potentially inappropriate medicines.[5] However, the scope of polypharmacy extends beyond its impact on care—polypharmacy also has ethical, social and economic consequences.[5]

Polypharmacy is important for people with HIV as it can have a significant negative impact on their health-related quality of life (HRQoL).[1,6]

Defining polypharmacy in Positive Perspectives Wave 2

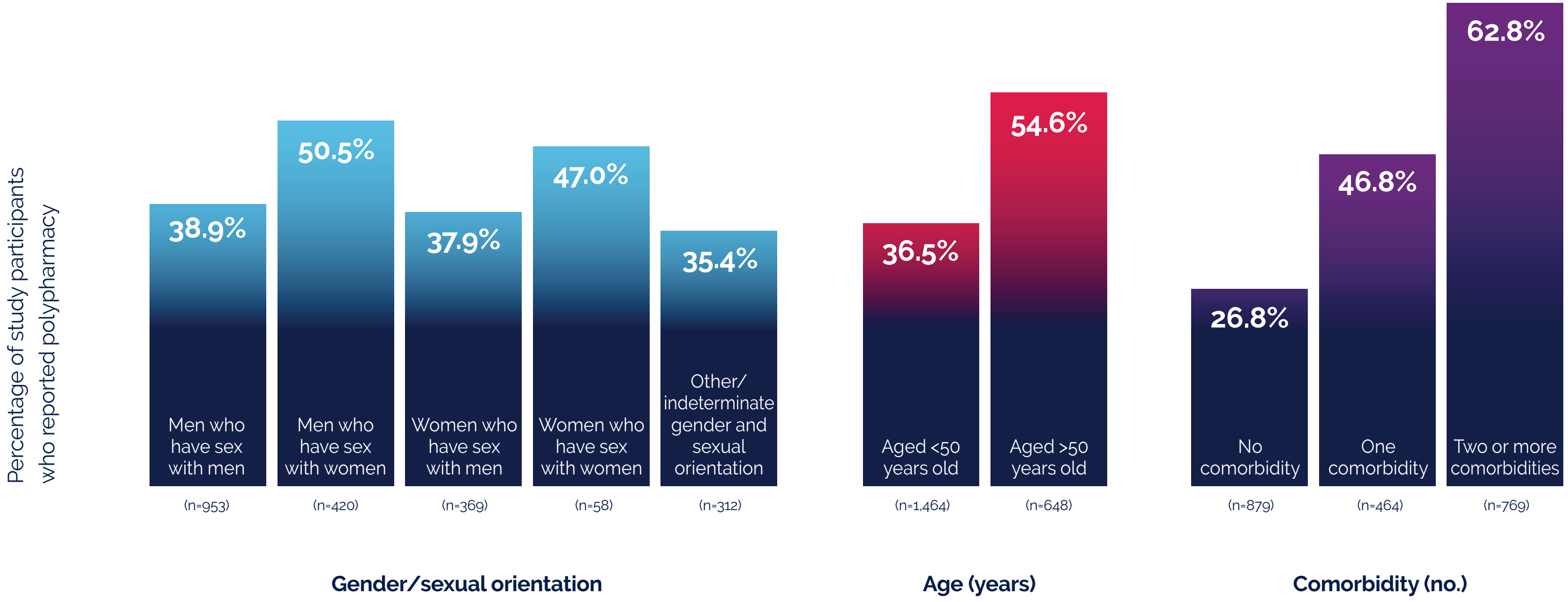
Polypharmacy in Positive Perspectives Wave 2 was defined as:[1]
- Taking 5 or more pills a day; or
- Taking medicines for 5 or more health conditions, including HIV

People with HIV who had 5 or more health conditions but took fewer than 5 medicines were not classed as reporting polypharmacy.

THE PREVALENCE OF POLYPHARMACY IN POSITIVE PERSPECTIVES WAVE 2

Overall, 2,112* people with HIV aged 18–84 participated in Positive Perspectives Wave 2. **The total prevalence of polypharmacy in this cohort was 42.1%;** however, there was variability in polypharmacy rates among subgroups:[1]

Figure 1. Rates of polypharmacy by people with HIV subgroups.[1*]

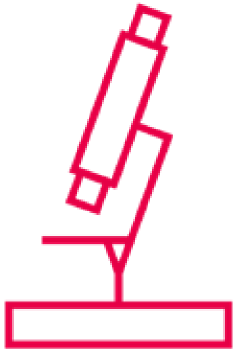


*Total number of participants was 2,112 as the figures were calculated before the inclusion of additional data from Russia and South Africa.
Adapted from Okoli C *et al.* 2020[1]

People with HIV in Australia (N=120)[7]

reported one non-HIV comorbidity

reported polypharmacy



The Australian subgroup in Positive Perspectives Wave 2 (n=120) had a mean age of 49.8 years, the mean duration of HIV was 16.3 years, 54.2% (65/120) of respondents were aged ≥50 years, and 88.3% (106/120) identified as male.[7] **These demographic characteristics are concordant with those of the HIV Futures 9 study,** conducted by the Australian Research Centre in Sex, Health and Society at La Trobe University.[8] These data show that the subgroup of **people with HIV in Australia, compared to the global Positive Perspectives Wave 2 cohort (N=2,389), are an ageing population** (≥50 years: Australia, 54.2% [65/120]; Global, 29.3% [699/2,389]).[7,9]

In the Australian subgroup, **people with HIV and polypharmacy reported higher rates of concern than those without polypharmacy about taking more medicines as they age** (58.1% [36/62] vs 37.7% [22/58], p=0.027) and were more open to ART with fewer medicines (91.9% [57/62] vs 77.6% [45/58], p=0.028).[7]

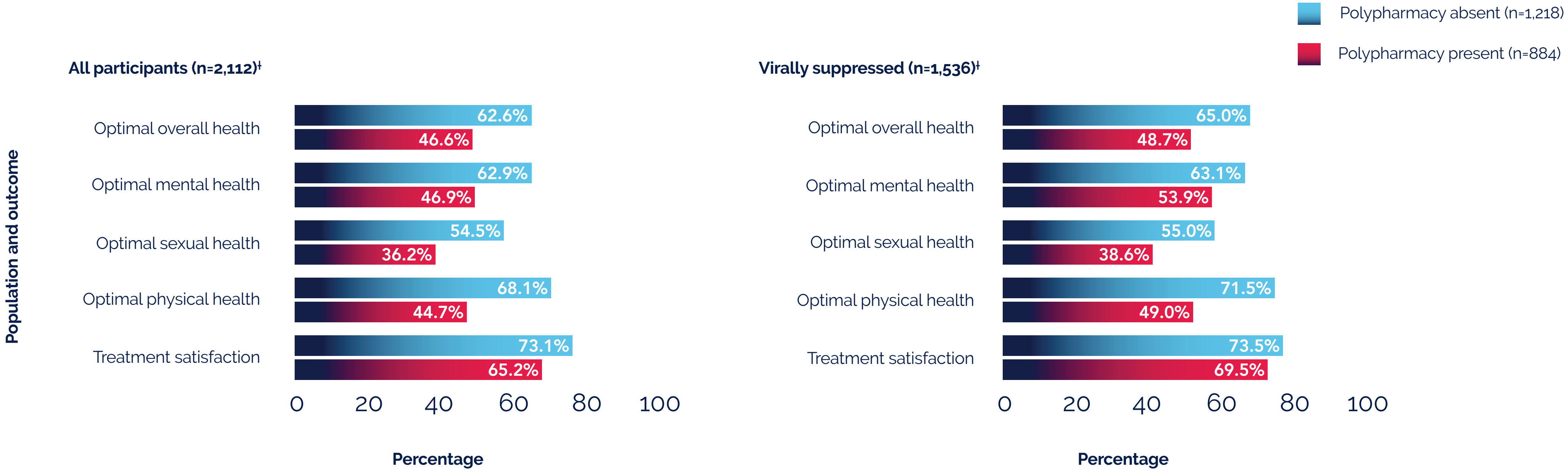
Almost half of the participants in Australia had concerns about taking more medicines as they aged (48.3%; 58/120). For participants who changed ART due to side effects, the desire to reduce their pill intake (32.1%; 18/56) and desire to reduce their medicine intake (23.2%; 13/56) were the top two co-existing triggers for the decision.[7]

THE RELATIONSHIP BETWEEN POLYPHARMACY AND QUALITY OF LIFE

Data from the global Positive Perspectives Wave 2 study show that **people with HIV who reported polypharmacy had lower rates of self-reported QoL outcomes** compared to people with HIV without polypharmacy.[1] Even among those study participants who self-reported viral suppression of their HIV, polypharmacy was associated with poorer health outcomes and treatment satisfaction.[1]

After adjusting for confounders, including comorbidities, **poorer QoL outcomes were consistently associated with people with HIV who reported polypharmacy** vs those with no polypharmacy.[1]

Figure 2. Comparison of prevalence of subjective measures of overall well-being by polypharmacy status.[1*]

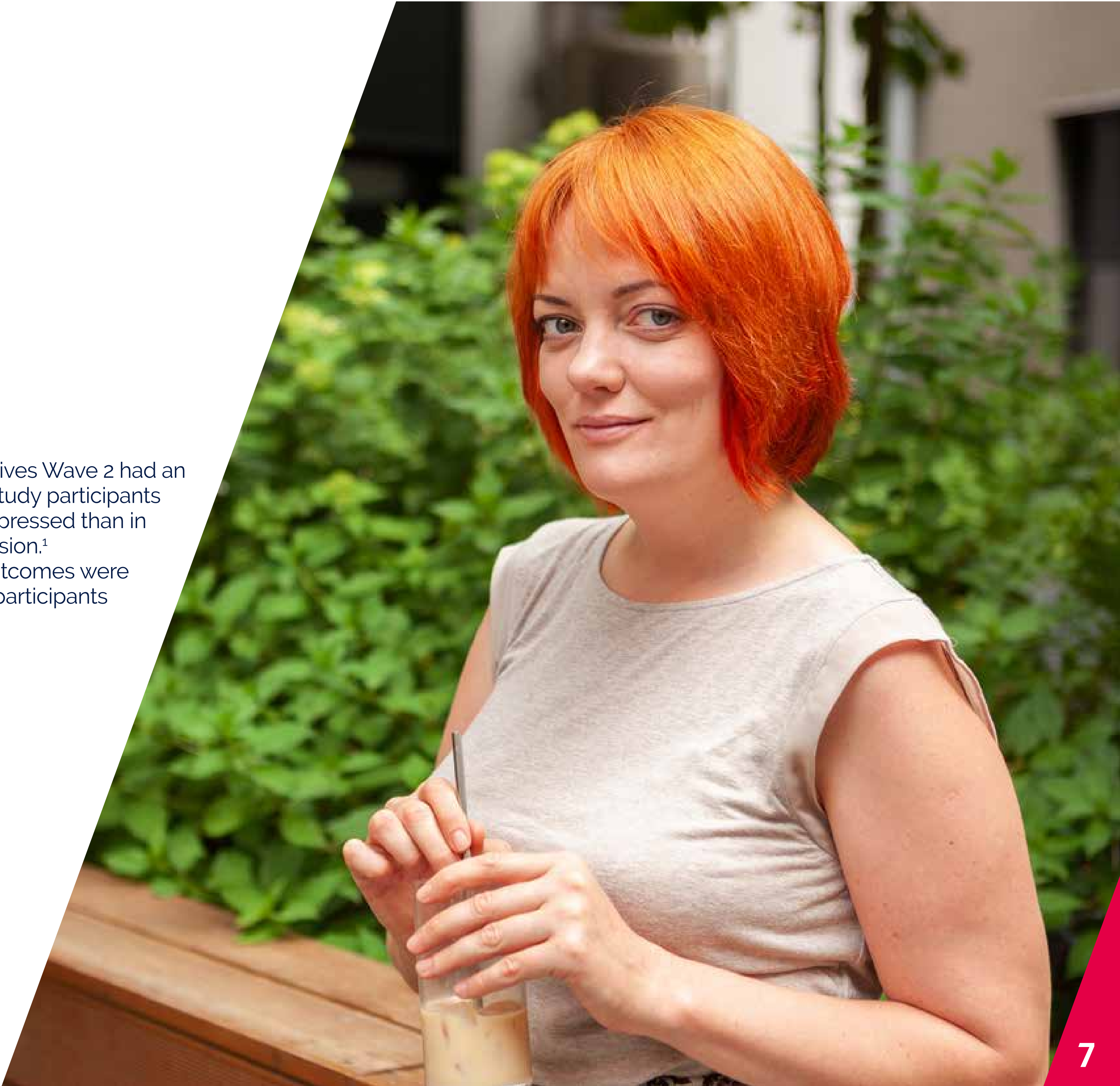


*Total number of participants was 2,112 as the figures were calculated before the inclusion of additional data from Russia and South Africa.

‡p<0.05 for all comparisons between respondents with and without reported polypharmacy.

Adapted from Okoli C *et al.* 2020[1]

Polypharmacy in Positive Perspectives Wave 2 had an greater negative effect on QoL in study participants who reported not being virally suppressed than in people who reported viral suppression.[1]
All rates of self-reported health outcomes were consistently poorer among study participants not reporting viral suppression.[1]



CONCERNS ABOUT POLYPHARMACY

Results from the Positive Perspectives Wave 2 study highlight the importance of people with HIV and their HCPs including evolving treatment needs and any other health conditions when planning ahead.[6] Additionally, open and active discussion should be fostered between HCPs and people with HIV so that current and future concerns about QoL and treatment needs can be addressed and planned for.[6]

A suitable communication tool for encouraging open and active dialogue between people with HIV and their HCPs is the PozQoL scale, a patient-reported outcomes measurement of QoL. Using a patient-reported outcome measure of QoL, such as PozQol, can help people with HIV and their HCPs achieve a patient-centred level of care and can promote open and active dialogue.[10]

To learn more about PozQoL and how it is used in clinical practice, head over to the PozQoL section of the site.

See how the PozQoL scale can be used to help foster open and active dialogue between HCPs and people with HIV

Read more

References:
1. Okoli C *et al. Prev Chronic Dis.* 2020; 17: E22. **2.** Shiels MS *et al. Lancet.* 2017; 389(10073): 1043–54. **3.** Trickey A *et al. Lancet HIV.* 2017; 4(8): e349–56. **4.** Schouten J *et al. Clin Infect Dis.* 2014; 59(12): 1787–97. **5.** Guaraldi G *et al. J A ntimicrob Chemother.* 2020; 75(12): 3425–32. **6.** ViiV Healthcare. Positive Perspectives Study, Wave 2 Results Report. June 2021. **7.** Allan B *et al. Popul Med.* 2021; 31: 1–14. **8.** Power J *et al. HIV Futures.* 9: Quality of Life Among People Living with HIV in Australia, monograph series number 116, Available at https://www.latrobe.edu.au/__data/assets/pdf_file/0007/1058614/HIV-Futures-9.pdf Accessed November 2021. **9.** Okoli C *et al. AIDS Behav.* 2021; 25(5): 1384–95. **10.** Lazarus JV *et al. Nat Commun.* 2021; 12(1): 4450.

The Positive Perspectives Wave 2 study was sponsored by ViiV Healthcare.

This study could not have been completed without people living with HIV who have generously shared their time, experiences, and bodies, for the purposes of this research. Much of the fight against HIV and AIDS relies upon people living with HIV continuing to put themselves forward and this research and our fight against HIV and AIDS is indebted to those past and present.