

APPENDIX 1

Country of residence of participants, country classification, and number of respondent per country

Country	Geographical location ¹	Classification ²	Number of respondents	Percentage of study population (%)
Albania	Eastern Europe	LMIC	1	0.315457
Belarus	Eastern Europe	LMIC	10	3.154574
Belgium	Western Europe	HIC	102	32.17666
Brazil	Latin America	LMIC	89	28.07571
Burundi	Africa	LMIC	1	0.315457
Colombia	Latin America	LMIC	1	0.315457
Denmark	Western Europe	HIC	1	0.315457
Estonia	Eastern Europe	HIC	1	0.315457
France	Western Europe	HIC	12	3.785489
Georgia	Eastern Europe	LMIC	14	4.416404
Germany	Western Europe	HIC	4	1.26183
Greece	Western Europe	HIC	1	0.315457
Guadeloupe	Western Europe	HIC	1	0.315457
Ireland	Western Europe	HIC	1	0.315457
Italy	Western Europe	HIC	3	0.946372
Kazakhstan	Asia	LMIC	20	6.309148
Lebanon	Asia	LMIC	1	0.315457
Lithuania	Eastern Europe	HIC	1	0.315457
Luxembourg	Western Europe	HIC	1	0.315457
Malta	Western Europe	HIC	2	0.630915
Moldova	Eastern Europe	LMIC	1	0.315457
Morocco	Africa	LMIC	1	0.315457
Netherlands	Western Europe	HIC	4	1.26183
Portugal	Western Europe	HIC	6	1.892744
Romania	Eastern Europe	LMIC	2	0.630915
Russia	Eastern Europe	LMIC	20	6.309148
Slovenia	Eastern Europe	HIC	1	0.315457
Tajikistan	Asia	LMIC	1	0.315457
Thailand	Asia	LMIC	1	0.315457
Turkey	Western Europe	LMIC	2	0.630915
UK	Western Europe	HIC	3	0.946372
Ukraine	Eastern Europe	LMIC	8	2.523659

1. UNITED NATIONS DGACM. <https://www.un.org/depts/DGACM/RegionalGroups.shtml>

2. World Bank Country and Lending Groups – World Bank Data Help Desk.

<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>

APPENDIX 2

Comparison of PLWH residing in different continents

	Asia (n=23)	Europe (n=202)	Latin America (n=90)	P-value*
Age, years: Mean (SD)	38.0 (9.67)	45.5 (12.0)	40.0 (10.3)	<0.0001
CD4 count: Mean (SD) ^a	650 (151)	670 (314)	717 (389)	0.556
Anxiety disorders: n (%)	6 (26.1%)	43 (21.3%)	21 (23.3%)	0.833
Depression disorders: n (%)	5 (21.7%)	44 (21.8%)	24 (26.7%)	0.650
Adaptation of HIV care: n (%)	9 (39.1%)	55 (27.2%)	40 (44.4%)	0.012
ART interruption: n (%)	2 (8.7%)	8 (4.0%)	3 (3.4%)	0.456
Recreational substance use: n (%)	13 (56.5%)	137 (67.8%)	49 (54.4%)	0.072
Observe physical distancing: n (%)	19 (82.6%)	190 (94.1%)	74 (82.2%)	0.003
Face mask use: n (%)	21 (91.3%)	99 (49.0%)	88 (97.8%)	<0.0001
Reported flu symptoms: n (%)	11 (47.8%)	95 (47.0%)	34 (37.8%)	0.321
Reported flu vaccination: n (%)	2 (8.7%)	113 (55.9%)	67 (74.4%)	<0.0001
^a 75 missing data				
*Yates corrected Chi-Squared test or Kruskal Wallis test as appropriate				

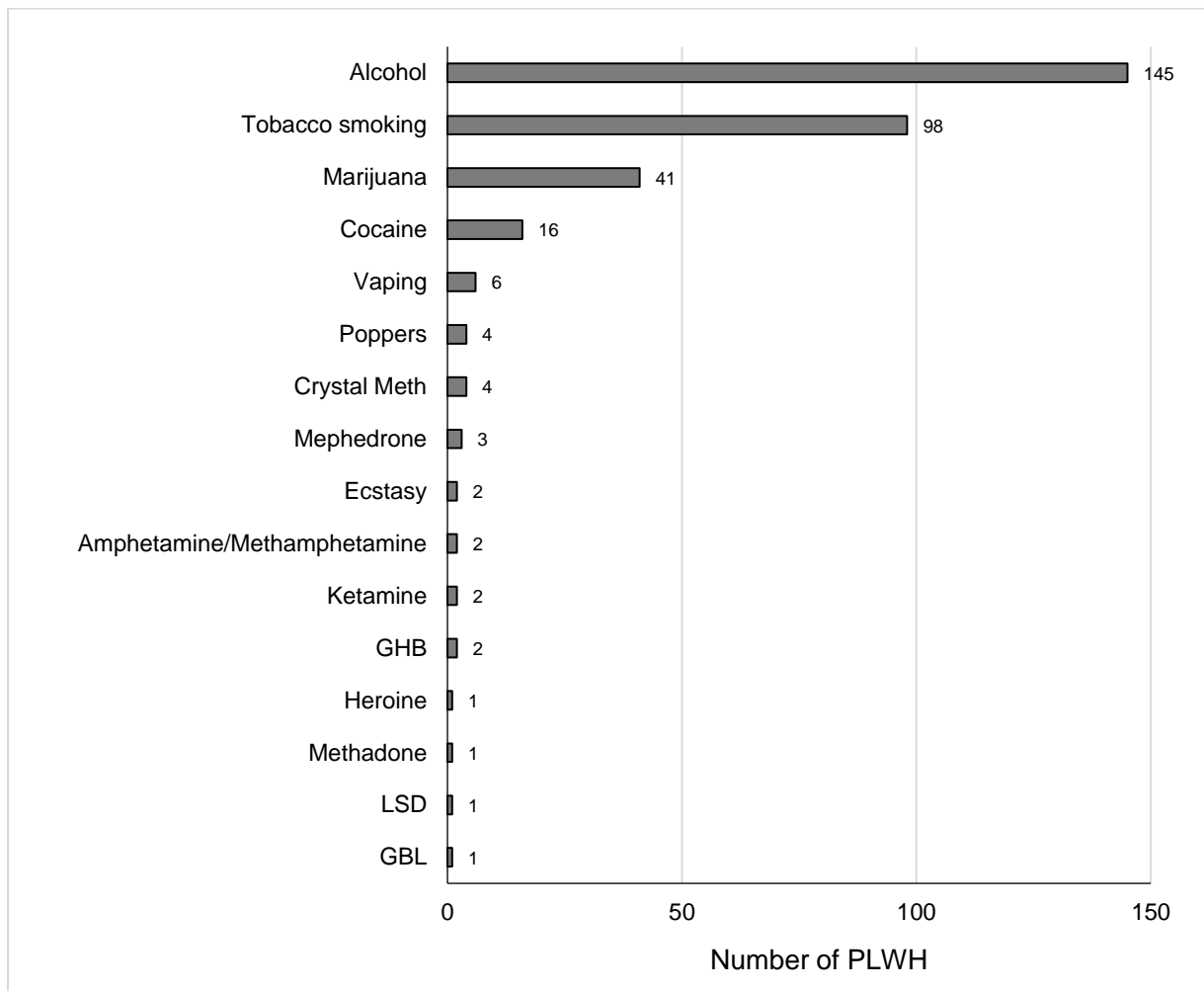
APPENDIX 3

Comparison of PLWH residing in Europe

	Western Europe (n=143)	Eastern Europe (n=59)	P-value*
Age, years: Mean (SD)	47.6 (12.4)	40.6 (9.38)	<0.0001
Most recent CD4 count: Mean (SD) ^a	679 (293)	656 (346)	0.672
Anxiety disorders: n (%)	25 (17.5%)	18 (30.5%)	0.062
Depression disorders: n (%)	27 (18.9%)	17 (28.8%)	0.171
Adaptation of HIV care: n (%)	35 (24.5%)	20 (33.9%)	0.232
ART interruption: n (%)	5 (3.6%)	3 (5.1%)	0.697
Recreational substance use: n (%)	100 (69.9%)	37 (62.7%)	0.405
Observe physical distancing: n (%)	135 (94.4%)	55 (93.2%)	0.749
Face mask use: n (%)	58 (40.6%)	41 (69.5%)	<0.0001
Reported flu symptoms: n (%)	62 (43.4%)	33 (55.9%)	0.141
Reported flu vaccination: n (%)	88 (61.5%)	25 (42.4%)	0.019
^a 52 missing data			
*Yates corrected Chi-Squared test or Mann Whitney U test as appropriate			

APPENDIX 4

Substance use among study participants



APPENDIX 5

Rationale for the inclusion of covariates in the multivariable analysis

Category	Covariates	Reason for inclusion in model
Socio-demographic	Age	Older age predisposes to symptoms
	Sex	To account for different lifestyles / disease risks between males and females
	LMIC / HIC residence	Different health settings / capacities
Preventive measures	Physical distancing	Reduced risk of COVID-19 and flu symptoms
	Face mask use	
	Recent flu vaccination	Reduced risk for flu-like illness
Treatment and care	Tenofovir treatment	Suspicion of effects on the coronavirus
	Adaptation HIV care	Treatment interruption could affect the overall health and symptoms of PLWH
<p>- CD4 count excluded from final model (many missing values, and no association in bivariate analysis)</p> <p>- Viral load not included in the model because it was detectable only in 17 participants, and there were several missing values.</p>		

APPENDIX 6

COVID-19 infection questionnaire for persons living with HIV

We would like to learn from you the effects that COVID-19 (including the confinement measures implemented) may have on a person living with HIV.

Please complete this anonymous survey which should not take longer than 10 minutes.

Section 1: General questions:

1. Age (in years): _____
2. Gender
 - ☐ Male
 - ☐ Female
 - ☐ Non-binary
 - ☐ Other
3. a. Which country do you currently live in? (country list)
b. Which city do you currently live in? _____
4. Maximum educational level:
 - ☐ Primary
 - ☐ Secondary
 - ☐ University undergraduate degree holder
 - ☐ University postgraduate degree holder

Section 2: General health issues

5. Have you been vaccinated against seasonal flu during the last 12 months?
 - ☐ Yes
 - ☐ No
6. Since January 2020 have you experienced a cold?
 - ☐ Yes
 - ☐ No
7. If yes, which symptoms did you experience? (multiple options possible)
 - ☐ Fever
 - ☐ Headache
 - ☐ Sore throat
 - ☐ Loss of taste
 - ☐ Stuffy and/or running nose
 - ☐ Loss of smell
 - ☐ Coughing
 - ☐ Shortness of breath
 - ☐ Muscle/body pain
 - ☐ General weakness
 - ☐ Nausea
 - ☐ Diarrhoea

- Other, specify_____

8. If you experienced any of these symptoms, how long did the illness last (all symptoms considered)?

- Less than one week
- More than one week
- Two or more weeks
- Not applicable

9. If you experienced any of these symptoms, were you or are you hospitalised for this illness?

- Yes
- No
- Not applicable

10. Have you been tested for COVID-19?

- Yes
- No

11. If yes, what was the result of the test?

- Positive
- Negative
- Don't know

If yes go to Q12, if no, skip to Q13

12. If you were positive for COVID-19:

Q13a Were you hospitalised at any stage?

- Yes
- No

Q13b If yes, how long were you hospitalised? ____ days

Q13c Did you receive breathing support at any stage?

- Yes
- No
- Don't know

13. If you were to suspect that you had COVID-19 symptoms, would you know who to contact for medical advice?

- Yes
- No

If yes go to Q14; if no skip to Q15

14. Who would you contact if you developed fever or cough?

- The physician where I'm being followed up
- A general practitioner

- Another doctor
- Other (specify): _____

15. As a person living with HIV, do you feel you are well informed about COVID-19 preventive measures and their impact on the continuity of your care (for example, provision of antiretroviral drugs, routine follow-up visits, etc)?

- Yes
- No

16. Over the last 2 weeks, how often have you been bothered by the following problems?

GAD-2 score:

Q17a. Little interest or pleasure in doing things

- Not at all (0)
- Several days (1)
- More than half the days (2)
- Nearly every day (3)

Q17b. Feeling down, depressed or hopeless

- Not at all (0)
- Several days (1)
- More than half the days (2)
- Nearly every day (3)

PHQ-2 score:

Q17c. Feeling nervous, anxious or on edge

- Not at all (0)
- Several days (1)
- More than half the days (2)
- Nearly every day (3)

Q17d. Not being able to stop or control worrying

- Not at all (0)
- Several days (1)
- More than half the days (2)
- Nearly every day (3)

Section 3: HIV follow-up and treatment

18. Have you visited a medical doctor or a health facility for your routine HIV follow-up during the last month?

- Yes
- No

19. When did you lastly do blood tests for HIV follow-up? (Month, year):

20. a. What was your last CD4 count? _____

b. On what date (Month, year): _____

21. a. Was your most recent viral load undetectable (less than 50 copies)?

- ☐ Yes
- ☐ No
- ☐ Do not know / do not remember

b. On what date (Month, year): _____

22. Are you currently taking anti-HIV treatment?

- ☐ Yes
- ☐ No

If yes go to Q23 and Q24; if no skip to Q25

23. Specify the anti-HIV treatment you take (name of medication, brand)

24. Have you recently encountered challenges to consult your HIV physician or to obtain your anti-HIV medication due to the measures taken against the Covid-19 epidemic? (multiple options possible)

- ☐ No, I have no problems getting my anti-HIV medication
- ☐ Yes, I cannot have my drugs because they are not available at the clinic/pharmacy
- ☐ Yes, I cannot go to the clinic/pharmacy due to mobility restrictions
- ☐ Yes, I have no money to buy medications, since I stopped working because of Covid-19 restrictions
- ☐ Other challenges (specify): _____

25. Did you interrupt your anti-HIV medication at any point during the Covid-19 epidemic?

- ☐ No
- ☐ Yes
- ☐ Don't remember

26. During the Covid-19 epidemic, were you:

- ☐ More likely to interrupt your anti-HIV medication?
- ☐ Less likely to interrupt your anti-HIV medication?
- ☐ As likely to interrupt your anti-HIV medication?

27. Did your HIV physician adapt your HIV care during the Covid-19 epidemic? (Multiple options possible)

- ☐ No change
- ☐ Yes, longer drug refills were given
- ☐ Yes, the location for collecting my drugs was changed
- ☐ Yes, some form of self-monitoring was used
- ☐ Yes, phone consultations were provided
- ☐ Yes, other (specify): _____

28. Do you take any other prescribed medication for other medical reasons?

- ☐ Yes

- No

29. If yes, please specify (drug name: _____; reason for prescription: _____)

30. Do you consume any of the recreational drugs listed below? (multiple options possible)

- Alcohol
- Tobacco
- Vaping
- Cocaine
- Heroin
- Marijuana
- Other (specify): _____
- None

Section 4: COVID-19 Transmission and Prevention

31. How concerned are you that you may get infected by COVID-19?

- Very concerned
- Somewhat concerned
- Not concerned

32. How concerned are you that you may infect a loved one with COVID-19?

- Very concerned
- Somewhat concerned
- Not concerned

33. Which protective measure are you using? (multiple options possible)

- I follow the 1.5-2m meters rule for social distancing
- I wear a face mask when going outside
- When I cough or sneeze, I cover mouth and nose with a paper tissue
- When I cough or sneeze, I wash my hands shortly afterwards
- I measure my body temperature at least twice every week
- I wash my hands with soap and water many times a day
- I use a hand sanitizer many times a day
- I avoid touching my face (eyes, nose and mouth)

☐ I fully understand what this study is about, and I consent to participate. All the information I provide can be used by researchers to better understand coronavirus disease and its effect on persons living with HIV infection.

SUBMIT

Thank you very much for your participation.

Further information about Covid-19 and this research, please visit the website www.ICPcovid.com