



HIV positive diagnosis among migrants compared to native-born in Europe and Central Asia: COBATEST network, 2021-2022

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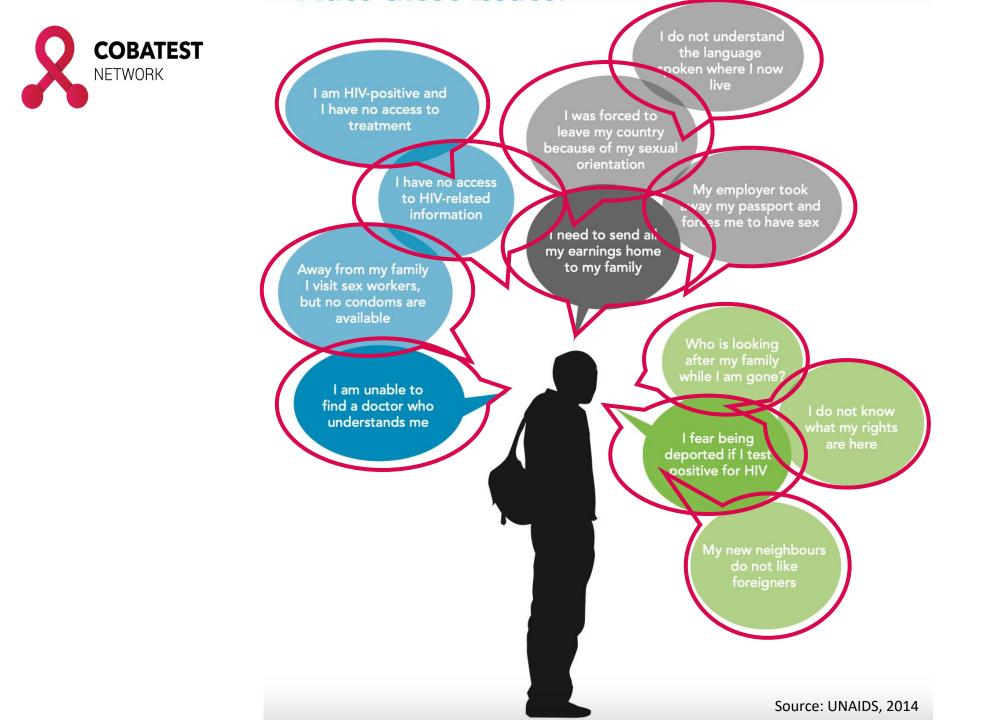






Introduction













Currently, around 6 million Ukrainians have left their homes since 2022 and reside in EU (UNHCR, 2023)

By near the end of 2022, 5.2 million people have fled Ukraine due to the war (UNHCR, 2023).

1,57 million Ukrainian citizens were authorised to stay in the EU at the end of 2021 (Eurostat, 2021)





 Community-Based Voluntary and Counseling and Testing Service (CBVCT) centers are considered an effective strategy for HIV testing, especially for key populations such as migrants.

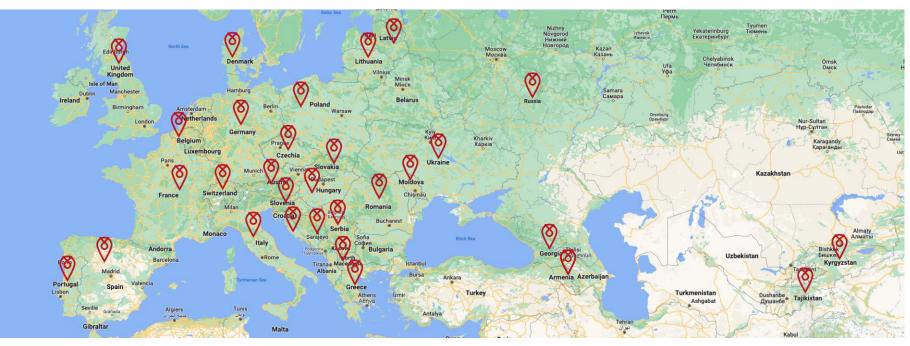
OPEN O ACCESS Freely available online	© 2019 The Author. HIV Medicine published by John Wiley & Sons Ltd on behalf of British HIV Association	DOI: 10.1111/hiv.12807 HIV Medicine (2019)
Towards Universal Voluntary HIV Testing and Counselling: A Systematic Review and Meta-Analysis of Community-Based Approaches Amitabh B. Suthar ^{1*} , Nathan Ford ¹ , Pamela J. Bachanas ² , Vincent J. Wong ³ , Jay S. Rajan ⁴ , Alex K. Saltzman ⁵ , Olawale Ajose ⁶ , Ade O. Fakoya ⁷ , Reuben M. Granich ⁸ , Eyerusalem K. Negussie ¹ , Rachel C. Baggaley ¹	ORIGINAL RESEARCH HIV testing strategies outside of health care settin European Union (EU)/European Economic Area (El systematic review to inform European Centre for Prevention and Control guidance S Croxford (D, ¹ L Tavoschi (D, ^{2.3} AK Sullivan, ^{1.4} L Combs, ⁵ D Raben, ⁵ V Delpech, ¹ SF Jakobsen (D, and S Desai (D) ¹ ed HIV testing to ad-	ngs in the EA): a Disease
Monisha Sharma ¹ , Roger Ying ² , Gillian Tarr ¹ & Ruanne Barr		





COBATEST Network

The COBATEST is a network of 111 Community-Based Voluntary and Counseling and Testing Service (CBVCT) centers in 29 European and 2 Central Asian countries.



Coordinated by:





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Methods

Objective

Describe HIV-testing trends and examine the prevalence of HIV positive diagnosis among migrants in Europe and Central Asia (ECA) compared with native-born individuals in 2021 and 2022.

Migrant

Persons who were born abroad.





Participating COBATEST Network members







Log-binomial multivariable regression models were fitted to compare the prevalence ratio of <u>HIV</u> <u>positive</u> diagnosis among migrants and native-born individuals across the two years, adjusting for covariates

> 48 centers (Disaggregated data)

66 COBATEST members

Descriptive analysis

(<u>HIV testing prevalence</u>) by: gender, keypopulation groups, HIV diagnosis and the two respective years, <u>stratified</u> by migrants and native-born individuals

18 (Aggregated data)





Results

Table 1. Characteristics of the total study population* by origin status

	Total sample % (n=203354)	Migrants, % (n=34855)	Native-born, % (n=168499)	P value*	
Sex		· · ·		<0.001	
Men	69.7	65.4	70.6		
Women	28.5	30.6	28		
Transgender	0.9	2.3	0.6		
Missing	0.9	1.7	0.8		
Age category				<0.001	
< 25	26.8	21.2	28		
>= 25	62.3	76.2	59.4		
Missing	10.9	2.6	12.6		
Time-period				<0.001	
2021	49.9	38	52.4		
2022	50.1	62	47.6		
HIV result				<0.001	
Positive	1.1	1.8	0.9		
Negative	98.9	98.2	99.1		

*Total sample includes disaggregated and aggregated data.





	Total sample % (n=203354)	2021 % (n= 101462)	2022 % (n= 101892)	P value
Sex				<0.001
Men	69.7	69	70.4	
Women	28.5	29.4	27.6	
Transgender	0.9	0.8	1	
Missing	0.9	0.8	1.1	
Age category				<0.001
< 25	26.8	25.9	27.7	
>= 25	62.3	56.9	67.6	
Missing	10.9	17.1	4.6	
HIV result				<0.001
Positive	1.1	0.9	1.2	
Negative	98.9	99.1	98.8	

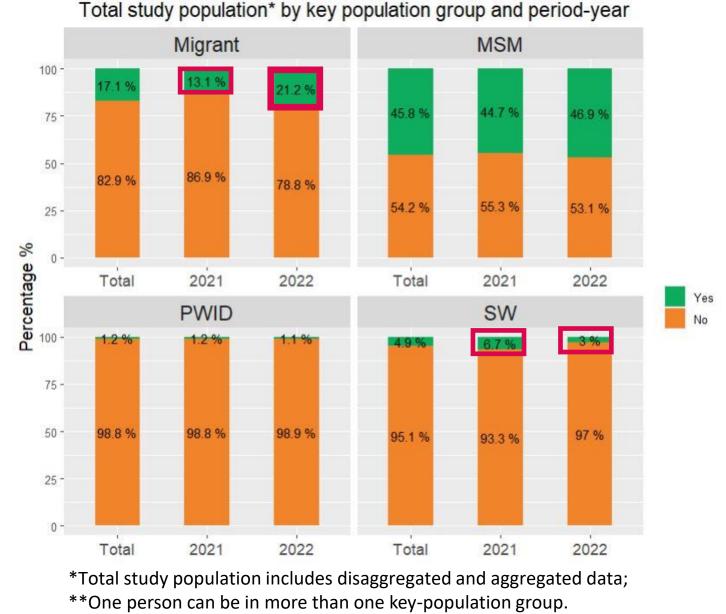
Table 2. Characteristics of the total study population* by time-period

*Total sample includes disaggregated and aggregated data.





Total study population n= 203354 2021 n= 101462 2022 n= 101892





Prevalence of HIV positive diagnosis in the disaggregated data* stratified by origin status: Multivariable analysis

Total disaggregated sample				Migrants				Native-born						
Variable	N	Estimate		p	Variable	N	Estimate		р	Variable	N	Estimate		р
Origin status					Year		1			Year				lai -
Native-born	31963		Reference		2021	3831		Reference		2021	14455		Reference	
Migrant	8087		2.33 (1.68, 3.22)	<0.001	2022	4256	in in the second se	1.25 (0.91, 1.72)	0.17	2022	17508		0.96 (0.73, 1.26)	0.76
Year		<u> </u>			Sex					Sex		T		
2021	18286		Reference		Men	4590	.	Reference		Men	20619	_	Reference	
2022	21764	F 	0.95 (0.73, 1.25)	0.721	Women	3134		0.62 (0.33, 1.17)	0.14		and the second se			0.00
Sex	Automation and a second		Tableton Meterican			000000000000000				Women	11132		0.51 (0.25, 1.03)	0.06
Men	25209	_	Reference	100 - 000 - 00	Transgender	363		2.88 (1.69, 4.81)	<0.001	Transgender	212		0.40 (0.02, 1.80)	0.37
Women	14266		0.57 (0.36, 0.91)	0.018	Age category		1			Age category				
Transgender	575		1.93 (1.21, 2.98)	0.004	16-25 y.o.	2560	Ŵ	Reference		16-25 y.o.	13235	, 📫	Reference	
Age category					26-45 y.o.	4710	**	1.21 (0.84, 1.78)	0.31	26-45 y.o.	15783	in the second se	1.22 (0.91, 1.65)	0.19
16-25 y.o.	15795		Reference		46-65 y.o.	793		0.97 (0.51, 1.74)	0.93	46-65 y.o.	2766		0.93 (0.55, 1.50)	0.78
26-45 y.o.	20493	4	1.23 (0.98, 1.56)	0.077	+65 y.o	24		- 1.88 (0.11, 7.67)	0.52	+65 y.o	179		0.69 (0.04, 3.09)	0.71
46-65 y.o.	3559		0.99 (0.66, 1.43)	0.947	MSM	24	1	1.00 (0.11, 7.07)	0.02	MSM	175	_	0.03 (0.04, 0.03)	0.71
+65 y.o	203 -		1.08 (0.18, 3.34)	0.913		5000	<u>i</u>			The second second		1		
MSM					No	5063	—	Reference		No	19245		Reference	
No	24308	-	Reference		Yes	3024	, -∎	2.87 (1.82, 4.74)	< 0.001	Yes	12718		5.99 (3.84, 9.94)	<0.001
Yes	15742	-	4.36 (3.17, 6.16)	<0.001	SW		4			SW				
SW		1			No	6204		Reference		No	31380		Reference	
No	37584		Reference		Yes	1883	, + 17 +	0.87 (0.54, 1.37)	0.56	Yes	583		1.32 (0.52, 2.72)	0.51
Yes	2466		1.07 (0.72, 1.55)	0.748	PWID		1			PWID		T	1.02 (0.02, 2.72)	0.01
PWID						0040		5.4			0.170.1	1	-	
No	39796	.	Reference		No	8012		Reference		No	31784	.	Reference	
Yes	254		2.36 (0.94, 4.71)	0.033	Yes	75		2.78 (0.88, 6.25)	0.04	Yes	179		1.99 (0.33, 6.20)	0.33
	0.2	2 0.5 1 2 5					0.2 0.5 1 2 5					0.08.0.20.51 2 5		

*The model was applied only to disaggregated data from 48 COBATEST member centers;

**A time-period*migrant variable refers to an interaction term between migrant and year (2021 vs.2022) that was included in the model;

***One person can be included in more than one key-population group;

PR, prevalence ratio.



Prevalence of HIV positive diagnosis in the disaggregated data* stratified by time-period: Multivariable analysis

		2021		2022					
Variable	N	Estimate	р	Variable	N	Estimate		p	
Origin status				Origin status		1			
Native-born	14455		Reference	Native-born	17509		Reference		
Migrant	3831	k −− 1	2.07 (1.45, 2.92) <0.001	Migrant	4256		3.29 (2.45, 4.38)	<0.001	
Sex				Sex		1			
Men	11618		Reference	Men	13592		Reference		
Women	6390 ·		0.37 (0.16, 0.78) 0.01	Women	7876	• 	0.75 (0.41, 1.38)	0.36	
Transgender	278		2.86 (1.55, 5.13) <0.001	Transgender	297		1.12 (0.50, 2.25)	0.76	
Age category				Age category					
16-25 y.o.	7125	.	Reference	16-25 y.o.	8670		Reference		
26-45 y.o.	9486	· · · · ·	1.14 (0.81, 1.62) 0.46	26-45 y.o.	11007	-	1.33 (0.98, 1.84)	0.07	
46-65 y.o.	1585	► I	0.95 (0.53, 1.64) 0.87	46-65 y.o.	1974	- -	1.00 (0.57, 1.65)	0.99	
+65 y.o	90	·	2.29 (0.38, 7.07) 0.24	+65 y.o	114 -	₽	1.02 (0.06, 4.52)	0.98	
MSM				MSM		1			
No	11017		Reference	No	13291	1	Reference		
Yes	7269		3.99 (2.52, 6.68) <0.001	Yes	8474	4	4.70 (3.05, 7.63)	<0.001	
SW				SW					
No	17080		Reference	No	20505		Reference		
Yes	1206	i	1.26 (0.71, 2.17) 0.42	Yes	1260		0.90 (0.50, 1.51)	0.71	
PWID				PWID					
No	18177		Reference	No	21620	, in the second se	Reference		
Yes	109	1	2.35 (0.59, 5.85) 0.14	Yes	145		- 2.26 (0.57, 5.73)	0.15	

*The model was applied only to disaggregated data from 48 COBATEST member centers;

**One person can be included in more than one key-population group; PR, prevalence ratio.





Limitations

- Aggregated data limiting the analysis.
- The data was not collected specifically for this study.
- Not all countries of ECA or all COBATEST members are presented in the study.





Conclusions

Migrants compared with Native-born	Migrants tested in 2022 compared with 2021	Migrant characteristics (HIV-positive diagnosis)
Significantly high PR	Higher PR of HIV- positive diagnosis in 2022	Significantly high PR among transgender migrants
	Significant increase in prevalence of migrants tested in 2022	Significantly high PR among MSM (2021 and 2022)





Analysis of data by country of origin to further tailor the strategies by specific groups within migrant population.

COBATEST envisions addressing this by already planned improvements in the standardized data collection tool.

Urgent need for inclusive health policies and scale-up of strategies for delivering HIV testing, prevention, and treatment tailored to migrant population







COBATEST Team at CEEISCAT



CEEIS Cat







Departament

de Salut



Participating COBATEST Network members

