

Assessing HIV related knowledge in an immigrant population-based survey

¹National Institute for Health and Welfare, ²Helsinki University Central Hospital

Background

Migrants are overrepresented among the new HIV cases in many European countries, including Finland. Good knowledge on HIV has been associated with tolerant attitudes towards HIV infected and risk diminishing practices such as HIV testing, needle exchange and safe sex. Understanding HIV related knowledge, attitudes and practices of migrants enables better planning of preventive measures and strategies for early diagnosis.

Methods

1366 immigrants of Russian, Somali and Kurdish background participated in the Finnish Migrant Health and Wellbeing Study ("Maamu") health examination in 2011-2012. HIV knowledge was assessed using five validated UNGASS core indicator questions. An additional question on the significance of HIV treatment was added (UNGASS_5+1) (Table 1). False answers were corrected and all the participants were offered an HIV test. Factors associating to answering correct to all UNGASS_5+1 questions were analyzed with logistic regression.

Results

1354 (99 %) participants to the Maamu health examination responded to the extended set of UNGASS_5+1 questions partly or completely. 262 (19 %) of the respondents answered correct to all UNGASS_5+1 questions. The most common misconception related to HIV spreading via mosquitos (Table 1). Belonging to Russian language group, having secondary education, being employed, knowing how to use internet and having participated in previous HIV testing were associated with significantly higher HIV knowledge (Table 2). HIV knowledge didn't correlate with years of residency in Finland. 95 % accepted the HIV test offered.

Label	UNGASS indicator question (correct answer)	Total %
UNGASS_1	Can the risk of HIV transmission be reduced by having sex with only one faithful, uninfected partner? (YES)	85 %
UNGASS_2	Can the risk of HIV transmission be reduced by using condoms? (YES)	67 %
UNGASS_3	Can a healthy-looking person have HIV? (YES)	80 %
UNGASS_4	Can a person get HIV from mosquito bites? (NO)	37 %
UNGASS_5	Can a person get HIV by sharing a meal with someone who is infected? (NO)	72 %
UNGASS_5+1	Can a person with HIV be treated so that she or he lives as long as a person without HIV? (YES)	71 %

Table 1. Percentage of correct answers to United Nations General Assembly Special Session (UNGASS) on HIV/AIDS Core Indicators. UNAIDS 2002. N=1354.

Conclusions

The study participants had important shortages in HIV knowledge. Misconceptions existed especially among those without secondary education and the unemployed. Therefore, preventive and educational campaigns on HIV should be directed to migrant populations in Finland and notably for "the marginalized among the marginalized". Those previously tested for HIV had better knowledge suggesting that HIV testing including pre-test counseling might be an efficient strategy for prevention among risk populations. The extended set of UNGASS_5+1 indicators questions on HIV knowledge might encourage participants to accept the HIV test. The markedly different socio-demographic determinants between the language groups should be considered while interpreting the results.

	Cases (total 1354)	Answered all correct (%)	Univariate p	Multivariate p	Adjusted OR (95% CI)
Sex					
Female	757	157 (20.7 %)	0.15	-	
Male	597	105 (17.6 %)			
Age in 3 categories					
18-29 years	438	86 (19.6 %)	0.95	-	
30-44 years	523	102 (19.5 %)			
45-64 years	393	74 (18.8 %)			
Years of residency in Finland					
<= 5 years	307	58 (18.9 %)	0.33	-	
6-14 years	586	106 (18.1 %)			
>= 15 years	417	91 (21.8 %)			
Unknown	44				
Language group					
Kurdish	513	61 (11.9 %)	<0.00	<0.00	1
Somali	373	36 (9.7 %)			
Russian	468	165 (35.3 %)			
Basic education					
Primary education	660	68 (10.3 %)	<0.00	<0.00	1.81 (1.26 - 2.61)
Secondary education	645	187 (29.0 %)			
Unknown	49				
Ability to read in Finnish or Swedish					
Good	1002	210 (21.0 %)	0.02	0.34	1.28 (0.77 - 2.12)
Poor	190	26 (13.7 %)			
Unknown	162				
Employment					
Employed	786	188 (23.9 %)	<0.00	<0.00	1.82 (1.29 - 2.58)
Un-employed	494	61 (12.3 %)			
Unknown	74				
Ability to use internet					
Yes	1111	238 (21.4 %)	<0.00	0.02	3.36 (1.19 - 9.53)
No	115	4 (3.5 %)			
Unknown	128				
Previously HIV tested					
Yes	453	139 (30.7 %)	<0.00	0.01	1.59 (1.14 - 2.23)
No or I don't know	900	123 (13.7 %)			
Unknown	1				
HIV test acceptability					
Accepts HIV test	1285	253 (19.7 %)	0.19	-	
Declines HIV test	68	9 (13.2 %)			
Unknown	1				

Table 2. Socio-demographic factors associating with the HIV knowledge evaluated with the UNGASS_5+1 indicator questions. Logistic regression analysis with IBM SPSS 23. N = 1159 (missing 195).