

Supplemental Files Annex 1. Bivariate analysis (odds ratios (OR) and 95% CIs) of HIV testing uptake among FSWs in Ukraine

Socio-demographic and Behavioral Characteristics		N (%)	OR (95% CIs)	p-value
Outcome 1: Self-reported HIV testing and receiving test result in the last 12 months				
Age	14-18 years	66(1.6)	1.4 (0.7-2.6)	0.21
	19-23 years	790(19.3)	1.5 (1.2-1.8)	p<0.01
	24-28 years	1308(32.1)	1.0 (0.8-1.3)	0.43
	29-33 years	1025(25.1)	1.1 (0.9-1.4)	0.17
	34+ years	888(21.8)	1.0 (ref)	
Age at first sexual intercourse	6-13 years	276(6.8)	1.3 (0.9-2.0)	0.13
	14-18 years	3550(87.8)	1.1 (0.8-1.4)	0.53
	19-25 years	219(5.4)	1.0 (ref)	
Age at first sex work	12-13 years	7(0.2)	0.7 (0.1-3.4)	0.68
	14-18 years	922(22.8)	1.5 (0.8-2.6)	0.13
	19-23 years	1902(47)	1.5 (0.8-2.6)	0.12
	24-28 years	941(23.3)	1.4 (0.8-2.4)	0.23
	29-33 years	215(5.3)	1.0 (0.5-1.8)	0.94
	34+ years	59(1.5)	1.0 (ref)	
Education level	<9 years of schooling	78(1.9)	1.0 (0.5-1.7)	0.98
	9 years of schooling	466(11.4)	1.3 (0.9-1.8)	0.07
	11 years of schooling	1877(46)	1.2 (0.9-1.7)	0.06
	Vocational school	1374(33.7)	1.1 (0.8-1.5)	0.23
	University degree	282(6.9)	1.0 (ref)	
Marital status	Unmarried living alone	2615(64.2)	0.9 (0.6-1.3)	0.82
	Married living with other SP	123(3)	0.6 (0.4-1.0)	0.11
	Married living alone	345(8.5)	0.9 (0.6-1.3)	0.65
	Unmarried living with SP	813(19.9)	1.0 (0.7-1.4)	0.92
	Married living with husband	181(4.4)	1.0 (ref)	
Employment status (beside sex work)	Schoolgirl/ Student	210(5.2)	1.1 (0.8-1.7)	0.36
	Have casual earnings	1189(293)	0.8 (0.6-1.0)	0.15
	Unemployed*	1709(42.1)	1.0 (0.8-1.3)	0.49
	Housekeeper	475(11.7)	0.9 (0.6-1.2)	0.58
	Incapacitated**	22(0.5)	0.9 (0.3-2.5)	0.98
	Have a permanent job	456(11.2)	1.0 (ref)	
Condom use with paying sexual partner	No	100(2.5)	0.3 (0.2-0.5)	p<0.01
	Yes	3974(97.5)	1.0 (ref)	
Condom use with non-paying sexual partner	No	805(19.7)	0.8 (.6-1.0)	0.14
	I had no such partner	2489(61.5)	1.0 (0.8-1.2)	0.47
	Yes	783(19.2)	1.0 (ref)	
Alcohol use in the last 30 days	Every day	959(23.5)	0.3 (0.2-0.5)	p<0.01
	More than once a week	1865(45.7)	0.3 (0.2-0.4)	p<0.01

	Less than once a week	952(23.4)	0.4 (0.2-0.6)	p<0.01
	Never	301(7.4)	1.0 (ref)	
Drug use ever	Yes	484(11.9)	0.9 (0.7-1.1)	0.65
	I used before, now I don't	712(17.5)	0.7 (0.619-0.8)	p<0.01
	No, I never used drugs	2874(70.6)	1.0 (ref)	
Injecting drug use in the last 12 months	Yes	259(6.3)	1.0 (0.7-1.3)	0.87
	No	3818(93.6)	1.0 (ref)	
Sex work venue: outdoors	Yes	2210(54.2)	1.3 (1.2-1.5)	p<0.01
	No	1867(45.8)	1.0 (ref)	
Sex work venue: indoors	Yes	2047(50.3)	0.8 (0.7-0.9)	0.01
	No	2030(49.7)	1.0 (ref)	
Sex work venue: Phone/Internet	Yes	1289(31.6)	0.70.6-0.8)	p<0.01
	No	2788(68.4)	1.0 (ref)	
Outcome 2: HIV prevalence				
Age	14-18 years	133(2.7)	-	
	19-23 years	1030(21.4)	0.2 (0.1-0.3)	p<0.01
	24-28 years	1471(30.6)	0.4 (0.3-0.6)	p<0.01
	29-33 years	1148(23.8)	0.7 (0.6-1.0)	0.10
	34+ years	1024(21.3)	1.0 (ref)	
Age at first sexual intercourse	6-13 years	344(7.2)	1.7 (0.8-3.4)	0.11
	14-18 years	4172(87.4)	1.5 (0.8-2.6)	0.16
	19-25 years	257(5.3)	1.0 (ref)	
Age at sex work	12-13 years	9(0.1)	1.5 (0.1-14.9)	0.70
	14-18 years	1208(25.3)	0.8 (0.3-2.1)	0.70
	19-23 years	2177(45.6)	1.0 (0.4-2.6)	0.92
	24-28 years	1056(22.1)	0.9 (0.3-2.3)	0.83
	29-33 years	250(5.2)	1.7 (0.6-4.7)	0.26
	34+ years	70(1.4)	1.0 (ref)	
Education level	<9 years of schooling	97(2)	6.1 (2.7-13.4)	p<0.01
	9 years of schooling	554(11.5)	2.5 (1.3-5.0)	0.01
	11 years of schooling	2243(46.6)	2.2 (1.2-4.2)	0.01
	Vocational school	1576(32.7)	2.1 (1.1-4.1)	0.01
	University degree	336(6.9)	1.0 (ref)	
Marital status	Unmarried living alone	3144(65.4)	1.5 (0.7-2.8)	0.21
	Married living with other SP	136(2.8)	0.6 (0.1-2.0)	0.42
	Married living alone	400(8.3)	1.6 (0.7-3.4)	0.18
	Unmarried living with SP	912(18.9)	2.0 (1.0-3.9)	0.04
	Married living with husband	214(4.4)	1.0 (ref)	
Employment status (beside sex work)	Schoolgirl/Student	350(7.3)	0.1 (0.041-0.7)	0.02
	Have casual earnings	1380(28.8)	2.8 (1.6-4.6)	p<0.01

	Unemployed*	1965(41)	2.5 (1.5-4.2)	p<0.01
	Housekeeper	522(10.9)	3.0 (1.7-5.2)	p<0.01
	Incapacitated**	23(0.4)	13.9 (5.2-37.3)	p<0.01
	Have a permanent job	547(11.4)	1.0 (ref)	
Condom use with paying sexual partner	No	149(3.1)	0.5 (0.2-1.2)	0.13
	Yes	4654(96.8)	1.0 (ref)	
Condom use with non-paying sexual partner	No	949(19.7)	0.7 (0.5-0.9)	0.04
	I had no such partner	2961(61.6)	0.7 (0.5-0.9)	0.03
	Yes	896(18.6)	1.0 (ref)	
Alcohol use in the last 30 days	Every day	1136(23.6)	1.7 (1.0-2.8)	0.02
	More than once a week	2219(46.1)	1.0 (0.6-1.7)	0.78
	Less than once a week	1115(23.2)	0.9 (0.5-1.6)	0.93
	Never	336(6.9)	1.0 (ref)	
Drug use ever	Yes	522(10.8)	5.9 (4.4-7.9)	p<0.01
	I used before, now I don't	811(16.9)	5.0 (3.8-6.5)	p<0.01
	No, I never used drugs	3463(72.2)	1.0 (ref)	p<0.01
Injecting drug use in the last 12 months	Yes	280(5.8)	6.2 (4.6-8.2)	p<0.01
	No	4526(94.2)	1.0 (ref)	p<0.01
Sex work venue: outdoors	Yes	2526(52.5)	2.6 (2.0-3.3)	p<0.01
	No	2280(47.4)	1.0 (ref)	
Sex work venue: indoors	Yes	2457(51.1)	0.7 (0.6-0.9)	0.01
	No	2349(48.8)	1.0 (ref)	
Sex work venue: Phone/Internet	Yes	1578(32.8)	0.7 (0.5-0.9)	0.01
	No	3228(67.1)	1.0 (ref)	
Outcome 3: HIV testing self-reported status				
Age	14-18 years	-	-	
	19-23 years	16(8.2)	0.1 (0.0-0.5)	p<0.01
	24-28 years	51(26.4)	0.3 (0.1-0.6)	0.01
	29-33 years	48(24.8)	0.8 (0.4-1.6)	0.62
	34+ years	78(40.4)	1.0 (ref)	
Age at first sexual intercourse	6-13 years	17(8.9)	3.2 (0.5-20.0)	0.20
	14-18 years	169(88.4)	3.9 (0.7-20.9)	0.10
	19-25 years	5(2.6)	1.0 (ref)	
Age at first sex work	12-13 years	1(0.5)	-	
	14-18 years	33(17.4)	2.8 (0.2-28.6)	0.38
	19-23 years	93(49.2)	3.6 (0.3-36.5)	0.26
	24-28 years	40(21.1)	9.5 (0.8-101.0)	0.06
	29-33 years	18(9.5)	28.2 (1.9-417.3)	0.01
	34+ years	4(2.1)	1.0 (ref)	
Education level	<9 years of schooling	6(3.1)	0.5 (0.0-4.7)	0.61

	9 years of schooling	26(13.4)	1.5(0.2-10.5)	0.66
	11 years of schooling	97(50.2)	0.8 (0.1-5.0)	0.82
	Vocational school	59(30.5)	1.3 (0.2-8.5)	0.74
	University degree	5(2.5)	1.0 (ref)	
Marital status	Unmarried living alone	111(57.5)	1.0 (0.0-15.9)	1.0
	Married living with other SP	4(2)	1.7 (0.2-12.9)	0.60
	Married living alone	15(7.7)	0.5 (0.0-2.7)	0.44
	Unmarried living with SP	55(28.4)	0.4 (0.0-2.1)	0.30
	Married living with husband	8(4.1)	1.0 (ref)	
Employment status (beside sex work)	Schoolgirl/ Student	1(0.5)	-	
	Have casual earnings	55(28.7)	1.9 (0.5-6.5)	0.29
	Unemployed*	92(48.1)	1.6 (0.4-5.4)	0.41
	Housekeeper	29(15.1)	0.7 (0.2-2.8)	0.72
	Incapacitated**	4(2)	4.5 (0.3-52.3)	0.22
	Have a permanent job	10(5.2)	1.0 (ref)	
Condom use with paying sexual partner	No	3(1.5)	-	
	Yes	190(98.4)	1.0 (ref)	
Condom use non-paying sexual partner	No	38(19.6)	0.5 (0.2-1.1)	0.11
	I had no such partner	105(54.4)	1.1 (0.6-2.0)	0.72
	Yes	50(25.9)	1.0 (ref)	
Alcohol use in the last 30 days	Every day	64(33.1)	1.8 (0.6-5.3)	0.27
	More than once a week	48(24.8)	1.9 (0.6-6.1)	0.23
	Less than once a week	70(36.2)	1.6 (0.5-4.7)	0.36
	Never	11(5.6)	1.0 (ref)	
Drug use ever	Yes	62(32.1)	8.3 (4.0-17.1)	p<0.01
	I used before, now I don't	63(32.6)	2.9 (1.5-5.3)	p<0.01
	No, I never used drugs	68(35.2)	1.0 (ref)	p<0.01
Injection drug use in the last 12 months	Yes	51(26.4)	4.7 (2.2-9.9)	p<0.01
	No	142(73.5)	1.0 (ref)	
Sex work venue: outdoors	Yes	140(72.5)	1.7 (1.0-3.0)	0.04
	No	53(27.4)	1.0 (ref)	
Sex work venue: indoors	Yes	82(42.4)	0.3 (0.2-0.6)	p<0.01
	No	111(57.5)	1.0 (ref)	
Sex work venue: Phone/Internet	Yes	44(22.7)	1.3 (0.7-2.34)	0.28
	No	149(77.2)	1.0 (ref)	

SP-sexual partner

*Unemployed by official records as sex work is not considered to be official occupation and cannot give official employment status (recognized by the government of Ukraine)

**Incapacitated- those who are receiving social security because of the limited employment due to disability