

[SUPPLEMENTARY WEB APPENDIX] STI risk perception in the British population and how it relates to sexual behaviour and STI healthcare use: findings from a cross-sectional survey (Natsal-3)

Supplementary Table 1: Self-perceived risk of STIs (excluding HIV), by age group and sex (sexually active men and women aged 16-74 years)

	Age Group														Total	
	16-19		20-24		25-34		35-44		45-54		55-64		65-74			
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Men																
Greatly at risk	1.6	[0.8,3.3]	2.4	[1.5,4.0]	0.9	[0.5,1.6]	0.7	[0.3,1.6]	0.8	[0.3,2.0]	0.9	[0.3,2.4]	0.5	[0.1,2.0]	1.0	[0.7,1.3]
Quite a lot	6.6	[4.7,9.2]	7.7	[5.7,10.2]	4.2	[3.3,5.4]	2.1	[1.3,3.5]	0.8	[0.4,1.6]	1.7	[0.8,3.5]	0.4	[0.1,1.7]	2.9	[2.5,3.4]
Not very much	48.3	[43.4,53.2]	42.1	[38.2,46.1]	29.3	[26.6,32.2]	21.2	[18.2,24.6]	18.4	[15.3,21.9]	15.4	[12.4,18.9]	7.3	[4.9,10.6]	24.0	[22.6,25.4]
Not at all at risk	43.5	[38.8,48.4]	47.8	[43.9,51.7]	65.6	[62.6,68.5]	75.9	[72.4,79.2]	80.0	[76.4,83.1]	82.0	[78.3,85.2]	91.9	[88.5,94.4]	72.1	[70.6,73.5]
<i>Denominators (unwt, wt)</i>	<i>542</i>	<i>349</i>	<i>751</i>	<i>596</i>	<i>1379</i>	<i>1241</i>	<i>719</i>	<i>1299</i>	<i>638</i>	<i>1299</i>	<i>519</i>	<i>861</i>	<i>328</i>	<i>473</i>	<i>4876</i>	<i>6022</i>
Women																
Greatly at risk	1.0	[0.4,2.5]	1.3	[0.6,2.6]	0.9	[0.5,1.6]	0.5	[0.2,1.1]	1.1	[0.5,2.1]	0.2	[0.0,1.4]	0.0	0.0	0.7	[0.5,1.0]
Quite a lot	5.5	[3.9,7.7]	5.8	[4.1,8.2]	2.5	[1.9,3.3]	1.1	[0.7,1.8]	1.0	[0.5,2.1]	0.9	[0.3,2.7]	0.4	[0.1,3.0]	2.1	[1.7,2.5]
Not very much	40.3	[36.1,44.6]	30.7	[27.7,34.0]	23.1	[21.1,25.1]	15.6	[13.4,18.1]	13.7	[11.5,16.3]	9.5	[7.3,12.1]	5.8	[3.4,9.5]	18.4	[17.4,19.4]
Not at all at risk	53.2	[48.9,57.6]	62.1	[58.7,65.4]	73.5	[71.4,75.5]	82.8	[80.3,85.1]	84.2	[81.5,86.6]	89.4	[86.5,91.7]	93.8	[90.0,96.2]	78.8	[77.7,79.9]
<i>Denominators (unwt, wt)</i>	<i>648</i>	<i>332</i>	<i>1023</i>	<i>596</i>	<i>2240</i>	<i>1247</i>	<i>1055</i>	<i>1298</i>	<i>875</i>	<i>1193</i>	<i>575</i>	<i>762</i>	<i>286</i>	<i>362</i>	<i>6702</i>	<i>5791</i>

Denominator: those aged 16-74 years reporting at least one sexual partner in the past year. unwt=unweighted denominators, wt=weighted denominators

Supplementary table 2: Factors associated with rating oneself as not very much, or greatly/quite a lot at risk of STIs versus not at all at risk (multinomial regression)

	Not at all at risk		Not very much at risk				Greatly/Quite a lot at risk				Denominators	
	%	95% CI	%	95% CI	aRRR	(95% CI)	%	95% CI	aRRR	(95% CI)	unwt	wt
Men												
5+ partners, past year												
No	66.8%	[64.8%,68.7%]	29.2%	[27.4%,31.1%]	1.00		4.0%	[3.3%,4.8%]	1.00		3116	3274
Yes	23.2%	[18.0%,29.4%]	47.4%	[40.5%,54.3%]	3.56	(2.45 - 5.17)	29.4%	[23.3%,36.3%]	15.67	(9.60 - 25.57)	256	195
Unsafe sex¹, past year												
No	70.2%	[68.1%,72.2%]	26.4%	[24.5%,28.4%]	1.00		3.4%	[2.8%,4.2%]	1.00		2596	2801
Yes	39.2%	[35.0%,43.5%]	47.0%	[42.8%,51.1%]	2.78	(2.22 - 3.47)	13.8%	[11.5%,16.6%]	6.10	(4.39 - 8.48)	769	664
Number of partners without a condom, past year												
0/1	70.1%	[68.1%,72.0%]	27.0%	[25.1%,28.9%]	1.00		2.9%	[2.4%,3.6%]	1.00		2807	3010
2+	26.4%	[22.0%,31.4%]	51.5%	[46.5%,56.4%]	4.29	(3.23 - 5.69)	22.1%	[18.3%,26.5%]	16.76	(11.18 - 25.10)	520	417
Same-sex partner(s), past year												
No	65.4%	[63.5%,67.3%]	29.7%	[27.9%,31.6%]	1.00		4.9%	[4.2%,5.7%]	1.00		3281	3396
Yes	18.0%	[11.3%,27.5%]	55.9%	[44.4%,66.8%]	7.09	(3.98 - 12.61)	26.1%	[16.3%,39.0%]	20.29	(8.73 - 47.15)	110	90
Heterosexual anal sex, past year												
No	65.1%	[63.0%,67.2%]	30.4%	[28.4%,32.4%]	1.00		4.5%	[3.7%,5.4%]	1.00		2671	2811
Yes	60.2%	[56.0%,64.2%]	30.5%	[26.8%,34.4%]	1.00	(0.81 - 1.24)	9.3%	[7.3%,11.8%]	2.02	(1.45 - 2.83)	716	670
Concurrent partnerships, past year²												
No	71.4%	[69.3%,73.3%]	25.5%	[23.6%,27.4%]	1.00		3.1%	[2.6%,3.9%]	1.00		2679	318
Yes	24.1%	[19.2%,29.9%]	56.0%	[49.9%,62.0%]	5.77	(4.12 - 8.09)	19.9%	[15.5%,25.2%]	16.20	(10.22 - 25.70)	370	3205
Prevalent STI³ detected in urine												
No	63.2%	[60.2%,66.1%]	31.6%	[28.8%,34.5%]	1.00		5.2%	[4.2%,6.4%]	1.00		1678	2032
Yes	42.8%	[28.4%,58.6%]	29.3%	[17.6%,44.7%]	1.27	(0.62 - 2.60)	27.8%	[15.2%,45.4%]	7.32	(2.89 - 18.55)	57	48
Women												
5+ partners, past year												
No	74.8%	[73.4%,76.2%]	22.3%	[21.0%,23.7%]	1.00		2.9%	[2.4%,3.4%]	1.00		4719	3324
Yes	29.0%	[22.1%,37.1%]	47.7%	[39.4%,56.2%]	4.22	(2.81 - 6.34)	23.2%	[16.4%,31.9%]	14.79	(8.64 - 25.32)	218	130
Unsafe sex¹, past year												
No	77.9%	[76.4%,79.4%]	20.1%	[18.7%,21.5%]	1.00		2.0%	[1.5%,2.5%]	1.00		3857	2823
Yes	51.0%	[47.3%,54.6%]	37.9%	[34.5%,41.4%]	2.47	(2.06 - 2.96)	11.2%	[8.9%,13.8%]	7.06	(5.00 - 9.98)	1075	625
Number of partners without a condom, past year												
0/1	77.0%	[75.6%,78.4%]	20.7%	[19.4%,22.1%]	1.00		2.2%	[1.8%,2.9%]	1.00		4334	3122
2+	36.0%	[31.5%,40.9%]	47.1%	[42.2%,52.1%]	3.94	(3.13 - 4.97)	16.8%	[13.1%,21.3%]	12.31	(8.37 - 18.11)	573	317
Same-sex partner(s), past year												
No	73.6%	[72.1%,75.0%]	22.9%	[21.6%,24.3%]	1.00		3.5%	[2.9%,4.2%]	1.00		4784	3352
Yes	60.3%	[51.6%,68.5%]	31.5%	[24.2%,40.0%]	1.60	(1.07 - 2.38)	8.1%	[4.2%,15.0%]	2.62	(1.23 - 5.56)	181	121
Heterosexual anal sex, past year												
No	74.3%	[72.8%,75.8%]	22.6%	[21.2%,24.0%]	1.00		3.1%	[2.5%,3.8%]	1.00		4059	2875
Yes	66.5%	[62.9%,70.0%]	26.9%	[23.7%,30.4%]	1.21	(1.00 - 1.47)	6.6%	[4.8%,8.8%]	2.06	(1.41 - 3.02)	896	588

Concurrent partnerships, past year²										
No	77.2%	[75.8%,78.7%]	20.1%	[18.7%,21.5%]	1.00		2.7%	[2.1%,3.4%]	1.00	4180 3024
Yes	34.0%	[28.5%,40.0%]	51.5%	[45.3%,57.6%]	4.83	(3.67 - 6.35)	14.5%	[10.1%,20.5%]	9.33	(5.62 - 15.51) 378 207
Prevalent STI³ detected in urine										
No	73.4%	[71.3%,75.5%]	22.7%	[20.7%,24.7%]	1.00		3.9%	[3.1%,4.9%]	1.00	2314 1989
Yes	57.4%	[45.5%,68.6%]	30.4%	[20.9%,42.0%]	1.37	(0.78 - 2.41)	12.2%	[6.6%,21.4%]	2.96	(1.46 - 6.02) 112 64

Supplementary table 2 footnotes:

Denominator: those aged 16-44 who reported at least one partner in past year. unwt=unweighted denominators, wt=weighted denominators

aRRR=relative risk ratio (adjusted for age), compared to rating oneself as 'not at all at risk'.

¹ Defined as reported no condom used at first occasion of sex with a new partner and/or sex with 2+ partners and no condom used with any partner. Excludes those who only had oral sex in the past year

² Based on up to 3 most recent partners in the past year.

³ Chlamydia trachomatis, Neisseria gonorrhoeae, Trichomonas vaginalis, or Mycoplasma genitalium. Denominators for prevalent STI in urine are smaller than for behavioural variables as urine was only requested from a sub-sample of participants

Missing data for self-reported behaviours was as follows: 5+ partners past year n=48, unsafe sex past year n=60, number of partners without a condom past year n=123, same-sex partner(s) past year n=1, heterosexual anal sex past year n=15, concurrency past year n=750.

Supplementary Table 3: Reporting of STI healthcare-use, chlamydia testing, sexual health clinic attendance, each in the past year by age group and sex (sexually active men and women aged 16-44 years)

	Age Group								Total	
	16-19		20-24		25-34		35-44		%	95% CI
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Men										
STI healthcare-use ¹	48.0	[43.3,52.7]	34.5	[30.9,38.3]	18.1	[16.0,20.4]	5.4	[4.0,7.0]	19.2	[17.8,20.6]
Sexual health clinic attendance	19.6	[16.1,23.6]	16.0	[13.3,19.1]	7.0	[5.8,8.5]	1.9	[1.1,3.1]	7.9	[7.0,8.8]
Chlamydia testing	42.5	[37.8,47.3]	32.2	[28.7,35.9]	15.1	[13.1,17.3]	4.3	[3.1,6.0]	16.7	[15.5,18.1]
<i>Denominators (unwt, wt)</i>	<i>542</i>	<i>349</i>	<i>751</i>	<i>596</i>	<i>1379</i>	<i>1241</i>	<i>719</i>	<i>1299</i>	<i>3391</i>	<i>3485</i>
Women										
STI healthcare-use ¹	62.0	[57.8,66.0]	56.8	[53.3,60.3]	25.5	[23.5,27.6]	10.9	[9.1,13.0]	28.9	[27.5,30.3]
Sexual health clinic attendance	26.7	[23.2,30.5]	21.0	[18.2,24.2]	7.4	[6.3,8.7]	2.3	[1.5,3.5]	9.6	[8.8,10.6]
Chlamydia testing	57.8	[53.7,61.9]	54.1	[50.5,57.6]	23.7	[21.7,25.8]	9.2	[7.6,11.1]	26.8	[25.4,28.2]
<i>Denominators (unwt, wt)</i>	<i>648</i>	<i>332</i>	<i>1023</i>	<i>596</i>	<i>2240</i>	<i>1247</i>	<i>1055</i>	<i>1298</i>	<i>4966</i>	<i>3473</i>

Supplementary table 3 footnotes:

Denominator: those aged 16-44 who reported at least one partner in past year. unwt=unweighted denominators, wt=weighted denominators

¹ Defined as reporting sexual health clinic attendance and/or chlamydia testing in the past year