## THE LANCET

## Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Field N, Mercer CH, Sonnenberg P, et al. Associations between health and sexual lifestyles in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3). *Lancet* 2013; published online Nov 26. http://dx.doi. org/10.1016/S0140-6736(13)62222-9.

Web appendix: Reporting of sexual response problems (men – erectile difficulties; women – vaginal dryness) lasting at least six months in the past year in relation to demographic and health characteristics of participants who reported at least one sexual partner in the past year

		-		Men	-	-	·			Women		
	%	95% CI	$AOR^{1,2}$	95% CI	p value	Denominator <sup>3,4</sup>	%	95% CI	$AOR^{1,2}$	95% CI	p value	$Denominator^{3,4}\\$
All	8.2%	(7.4-9.2)	-	-		4830, 5964	8.0%	(7.2-8.9)	-	-		6659, 5748
DEMOGRAPHIC CHARACTERISTICS												
Age-group					< 0.0001						< 0.0001	
16-24	2.4%	(1.6-3.5)	1.00			1275, 933	2.9%	$(2 \cdot 2 - 3 \cdot 9)$	1.00			1660, 922
25-34	3.7%	$(2 \cdot 8 - 5 \cdot 0)$	1.89	$(1 \cdot 10 - 3 \cdot 26)$		1374, 1236	4.9%	$(4 \cdot 0 - 6 \cdot 1)$	1.54	(1.02-2.32)		2234, 1245
35-44	4.0%	$(2 \cdot 7 - 6 \cdot 0)$	2.13	$(1 \cdot 12 - 4 \cdot 05)$		718, 1297	3.6%	$(2 \cdot 5 - 5 \cdot 0)$	1.06	(0.64-1.74)		1045, 1285
45-54	8.2%	$(6 \cdot 2 - 10 \cdot 8)$	4.23	$(2\cdot 43-7\cdot 39)$		630, 1186	8.8%	(6.9-11.1)	2.65	(1.71-4.12)		870, 1186
55-64	17.9%	$(14 \cdot 6 - 21 \cdot 8)$	9.70	(5.59-16.82)		510, 845	22.1%	(18.7-25.9)	7.57	(4.93-11.64)		569, 755
65-74	26.2%	(21-5-31-6)	16.50	(9.46-29.0)		323, 467	15.9%	(11.9-20.9)	4.87	(2.92-8.14)		281, 355
Relationship status					0.1234						0.0016	
Living with a partner	9.1%	(7.9-10.3)	1.00			2706, 4261	9.3%	(8.3-10.5)	1.00			3964, 4166
In a steady relationship, not cohabiting	6.1%	(4.6-8.1)	1.35	(0.94-1.94)		946, 758	5.9%	(4.5-7.7)	1.07	(0.77-1.49)		1358, 788
No steady relationship, previously cohabited	9.4%	(6.8-12.8)	1.19	(0.79 - 1.79)		445, 387	4.0%	$(2 \cdot 8 - 5 \cdot 8)$	0.47	(0.31-0.70)		749, 460
No steady relationship, never cohabited	3.8%	$(2 \cdot 6 - 5 \cdot 7)$	1.67	(1.02-2.74)		724, 550	2.1%	(1-1-4-1)	0.64	(0.31-1.30)		578, 329
GENERAL HEALTH												
Self-reported general health status					< 0.0001						0.0111	
Very good	5.5%	$(4 \cdot 4 - 6 \cdot 8)$	1.00			2070, 2446	6.8%	(5.7-8.1)	1.00			2828, 2427
Good	7.8%	(6.5-9.2)	1.22	(0.90-1.66)		2046, 2604	7.3%	$(6 \cdot 2 - 8 \cdot 6)$	0.98	(0.75-1.29)		2846, 2417
Fair	16.3%	(13-1-20-1)	2.32	(1.60-3.37)		578, 741	12.9%	(10-3-16-0)	1.57	$(1 \cdot 12 - 2 \cdot 20)$		779, 708
Bad or very bad	18.8%	(12-4-27-4)	2.30	(1.30-4.07)		135, 171	14.0%	(9.4-20.5)	1.57	(0.94-2.64)		206, 195
Long-standing illnesses or disability					0.0019						0.0009	
None	6.0%	(5.1-7.0)	1.00			3580, 4255	6.0%	$(5 \cdot 2 - 6 \cdot 9)$	1.00			4836, 4020
Non-limiting	13.3%	(10.5-16.8)	1.50	(1.07-2.11)		607, 862	12.9%	(10-3-15-9)	1.70	(1.25-2.30)		844, 797
Limiting	14.5%	(11.8-17.8)	1.65	$(1 \cdot 20 - 2 \cdot 26)$		642, 846	12.7%	(10-4-15-5)	2.29	(1.74-3.01)		978, 930
Number of self-reported chronic conditions <sup>5</sup>					< 0.0001						0.0109	
0	5.0%	$(4 \cdot 2 - 6 \cdot 0)$	1.00			3447, 3985	5.5%	(4.7-6.4)	1.00			4352, 3531
1	12.1%	(10.0-14.6)	1.63	$(1 \cdot 19 - 2 \cdot 22)$		936, 1328	11.1%	(9-2-13-3)	1.62	(1.23-2.15)		1553, 1415
>=2	20.1%	$(16 \cdot 3 - 24 \cdot 5)$	2.18	(1.52-3.11)		443, 647	13.8%	(11-2-16-9)	1.53	$(1 \cdot 10 - 2 \cdot 12)$		751, 799
Body mass index (BMI)					0.6876						0.1536	
Normal: 18·5-25 kg/m2	7.2%	(6.0-8.7)	1.00			2148, 2363	8.5%	$(7 \cdot 3 - 9 \cdot 8)$	1.00			2769, 3342
Underweight: <18.5 kg/m2	0.7%	(0.1-4.6)	-	-		78, 67	4.8%	(2.5-9.0)	1.01	(0.49 - 2.10)		230, 149
Overweight: 25-30 kg/m2	8.6%	$(7 \cdot 2 - 10 \cdot 3)$	0.93	(0.70 - 1.25)		1684, 2315	8.8%	(7.3-10.6)	0.79	(0.60-1.04)		1616, 1501
Obese: 30-35 kg/m2	11.3%	(8.7-14.7)	1.17	(0.80-1.73)		579, 803	8.6%	(6-4-11-7)	0.78	(0.54-1.14)		686, 656
Obese: >35 kg/m2	9.1%	(5.6-14.6)	0.92	(0.50-1.71)		178, 241	6.2%	(3.9 - 9.6)	0.56	(0.33-0.95)		368, 334

Part	Difficulty walking up stairs due to health problem						0.0144						0.5890	
Machaification   Mach	No diff	ficulty	7.3%	(6.4-8.3)	1.00			4467, 5451	7.4%	$(6 \cdot 6 - 8 \cdot 3)$	1.00			6053, 5101
Part	Some diff	iculty	16.4%	$(12 \cdot 1 - 21 \cdot 9)$	1.40	(0.92-2.15)		277, 393	13.6%	(10-4-17-6)	1.18	(0.83-1.67)		449, 481
Part	•	ınable	24.2%	(15.7-35.2)	2.10	(1.16-3.79)		86, 120	10.8%	(6.3-17.9)	0.84	(0.44-1.59)		157, 166
Part	SPECIFIC HEALTH CONDITIONS													
Mathematical   Math	Any cardiac or vascular disease <sup>6</sup>						0.2254						0.8819	
Part		No	7.6%	` /	1.00			4648, 5696	7.8%	$(7 \cdot 1 - 8 \cdot 7)$	1.00			6541, 5612
1		Yes	22.9%	$(17 \cdot 1 - 30 \cdot 0)$	1.34	(0.83-2.15)		181, 266	16.0%	(9.7-25.3)	1.05	(0.56-1.97)		116, 135
Diabets         Frage 18 mode	Hypertension						0.2167						0.9600	
Mathematical Registry   1968   1978				( /				*						,-
Marche   M		Yes	18.6%	$(14 \cdot 8 - 23 \cdot 1)$	1.27	(0.87 - 1.84)		411, 657	14.0%	(11.0-17.8)	1.01	(0.70-1.45)		502, 580
Mathematic   Mat	Diabetes		<b>-</b> · ·	(5005)	4.00		0.2522	1552 5701	<b>=</b> 00/	(7.2.0.0)	4.00		0.3202	- 100 - 77-50
Chronic nirways disease				` ,		(0.00.2.27)		,		` ′		(0.40.1.25)		
Marchinistan   Mar		Yes	20.6%	(14.4-28.6)	1.37	(0.80-2.37)	0.0004	167, 262	10.7%	(6.7-16.6)	0.73	(0.40-1.35)	0.0217	164, 184
Arthrition    Post   State	Chronic airways disease	NT	0.20/	(7.2.0.1)	1.00		0.9004	4700 5017	0.00/	(7.2.0.0)	1.00		0.9317	6600 5701
Arthritis				` /		(0.25.2.50)		*		` ,		(0.20.2.05)		
Marchine   No   No   No   No   No   No   No   N	Authuitio	res	18.1%	(8.0-33.8)	0.94	(0.33-2.30)	0.7490	30, 46	11.9%	(3.7-32.3)	1.00	(0.29-3.83)	0.6216	28, 20
No   1.0	Artifius	No	7 40/	(6.5.9.2)	1.00		0.7460	4510 5500	7 204	(6.4.9.0)	1.00		0.0210	6155 5156
Probability of pelvisor hip replacement   1				` '		(0.70 1.65)		*		` /		(0.75 1.61)		
No   No   No   No   No   No   No   No	Broken hin ar polyis or hin replacement	1 68	10.570	(14.2-23.7)	1.07	(0.70-1.03)	0.9467	310, 403	13.370	(12.3-19.4)	1.10	(0.73-1.01)	0.0262	302, 391
Packache, or bone or muscle disease for >3m in past year   7	broken inp or pervis or inpreparement	No	8.1%	(7.2-9.1)	1.00		0.7401	4763 5866	8.1%	(7.3-8.9)	1.00		0.0202	6593 5674
Packache, or bone or muscle disease for >3min past year   No   7.8%   66.94.8%   1.0%   0.01.57)   1.0%   0.088.1%   1.0%   0.081.57)   1.0%   0.081.572   1.0%   0						(0.46-2.08)		*		,		(0.07-0.85)		
No	Backache, or hone or muscle disease for >3m in past year	105	10 770	() 0 20 ))	0 ) 1	(0 10 2 00)	0.9285	05, 75	5 070	(10, 17)	0 23	(0 07 0 05)	0.0004	05, 75
Peressive symptoms?         Yes         11-9%         (9-0-15-7)         1-02         (0-68-15-1)         491,691         14-4%         (11-61-78)         1-85         (1-32-2-61)         809,752           Depressive symptoms?         Verification         7-8%         (6-9-8-8)         1-00         4377,5463         7-7%         (6-9-8-6)         1-00         5878,5143           Prostate disease or surgery         No         7-7%         (6-8-8-7)         1-00         4713,5784         -	Sucincial, or some of masere alsouse for your in pass your	No	7.8%	(6.9-8.8)	1.00		0 7200	4337, 5271	7.1%	(6.3-7.9)	1.00		0 000.	5848, 4994
Popersive symptoms				,		(0.68-1.51)		*		,		(1.32-2.61)		
No   7-8%   6-9-8-8   1-00   4377, 5463   7-7%   (6-9-8-6)   1-00   5878, 5143     Yes   12-8%   (9-5-16-9)   1-86   (1-27-2-72)   447, 494   11-0%   (8-5-14-1)   1-84   (1-31-2-58)   777, 601     Prostate disease or surgery	Depressive symptoms <sup>7</sup>			(		( /	0.0016	,		( /		( /	0.0004	,
Prostate disease or surgery  No 7.7% (6.8-8.7) 1.00 4713,5784		No	7.8%	(6.9-8.8)	1.00			4377, 5463	7.7%	(6.9-8.6)	1.00			5878, 5143
No 7-7% (6-8-8-7) 1-00 4713,5784		Yes	12.8%	(9.5-16.9)	1.86	(1.27-2.72)		447, 494	11.0%	(8.5-14.1)	1.84	(1.31-2.58)		777, 601
Yes   25-3%   (18-2-34-1)   1-46   (0-88-2-45)   115, 178   -   -   -   -   -   -   -   -	Prostate disease or surgery						0.1463							
Menopause8		No	7.7%	(6.8-8.7)	1.00			4713, 5784	-	-	-	-	-	-
No   -   -   -   -   -   -   -   2.3%   (1.6-3.4)   1.00     1161, 1557		Yes	25.3%	$(18 \cdot 2 - 34 \cdot 1)$	1.46	(0.88-2.45)		115, 178	-	-	-	-	-	-
Yes         -	Menopause <sup>8</sup>												0.0200	
SATISFACTION AND SEXUAL ACTIVITY           Sexually active in the past four weeks         0.4451         0.2429           No 10.9% (8.9-13.4)         1.00         1011, 1158 10.6% (8.8-12.7)         1.00         1408, 1245		No	-	-	-	-	-	-	2.3%	$(1 \cdot 6 - 3 \cdot 4)$	1.00			1161, 1557
Sexually active in the past four weeks         0.4451         0.2429           No 10.9% (8.9-13.4)         1.00         1011, 1158 10.6% (8.8-12.7)         1.00         1408, 1245		Yes	-	-	-	-	-	-	11.6%	(10.0-13.5)	1.91	$(1 \cdot 10 - 3 \cdot 30)$		265, 367
No 10·9% (8·9-13·4) 1·00 1011, 1158 10·6% (8·8-12·7) 1·00 1408, 1245	SATISFACTION AND SEXUAL ACTIVITY													
	Sexually active in the past four weeks						0.4451						0.2429	
Yes $7.5\%$ $(6.6-8.6)$ $0.89$ $(0.65-1.21)$ $3741,4717$ $7.3\%$ $(6.5-8.3)$ $0.85$ $(0.64-1.12)$ $5122,4402$		No	10.9%	(8.9-13.4)	1.00			1011, 1158	10.6%	(8.8-12.7)	1.00			1408, 1245
		Yes	7.5%	$(6 \cdot 6 - 8 \cdot 6)$	0.89	(0.65-1.21)		3741, 4717	7.3%	(6.5-8.3)	0.85	(0.64-1.12)		5122, 4402

Associations between health and sexual lifestyles in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3)

Satisfied with sex life		< 0.0001		<0.0001
	No 13.8% (11.9-15	9) 1.00	1533, 1944 13.7% (12.0-15.7)	1.00 2009, 1775
	Yes 5.6% (4.7-6	6) 0.37 (0.28-0.48)	3297,4020 $5.5%$ $(4.7-6.4)$	0.34 (0.27-0.44) 4648, 3972

<sup>&</sup>lt;sup>1</sup> AOR=adjusted odds ratio.

<sup>&</sup>lt;sup>2</sup> All models were adjusted for age and relationship status. Models investigating age and relationship status also adjusted for self-assessed general health status. Models investigating specific conditions were also adjusted for comorbidity, for which comorbidity was coded as 0=0-1 specific conditions and  $1=\ge 2$  specific conditions.

<sup>&</sup>lt;sup>3</sup> Shows unweighted and weighted denominators, which may vary across variables due to item non-response.

<sup>&</sup>lt;sup>4</sup> Denominator is participants reporting one or more sexual partner in the past year.

<sup>&</sup>lt;sup>5</sup> Measure of comorbidity and includes arthritis, heart attack, coronary heart disease, angina, other forms of heart disease, hypertension, stroke, diabetes, broken hip or pelvis bone or hip replacement ever, backache lasting longer than 3 months, any other muscle or bone disease lasting longer than 3 months, depression, cancer, and any thyroid condition treated in the past year.

<sup>&</sup>lt;sup>6</sup> Heart attack, coronary heart disease, angina, other forms of heart disease, and stroke.

<sup>&</sup>lt;sup>7</sup>Respondents were asked whether they had often been bothered by feeling down, depressed, or hopeless in the past 2 weeks, and whether they had often been bothered by little interest or pleasure in doing things in the past 2 weeks, with a validated two-question patient health questionnaire (PHQ-2).

<sup>&</sup>lt;sup>8</sup> Women deemed to be postmenopausal when they had not menstruated in the past year, with analysis restricted to those aged 45–64 years.