SEXUAL BEHAVIOUR

Sex partner acquisition while overseas: results from a British national probability survey

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Background: Over the past 20 years, there has been a huge increase in the number of overseas trips made by UK residents. Although a number of studies have examined the frequency of overseas partner acquisition, they have used convenience samples and thus are not generalisable to the British general population.

Methods: A national probability sample survey was carried out in 1999–2001 of 12 110 men and women aged 16–44 years resident in Britain. Sociodemographic, health-related, travel, sexual behaviour and attitudinal data were collected by computer-assisted interviewing. The main outcomes were the proportion of British residents who reported new sexual partners overseas in the past 5 years, the country of origin of these new sex partners, and the association between reporting a new partner while overseas with a range of demographic, behavioural and attitudinal variables.

Results: 13.9% of men and 7.1% of women reported having new sexual partner(s) while overseas in the past 5 years. Among respondents who were aged 16–24 and never married, the proportions were significantly higher (23.0% of men and 17.0% of women). Half of those with new sex partners overseas reported their partner's origin as the UK, and over a third as another European country. In addition to age and marital status, reporting new partners overseas was associated with a higher number of partners, paying for sex (among men), reporting a diagnosis of sexually transmitted infection, and HIV testing. Adjustment for sociodemographic factors attenuated the magnitude of, but did not remove, these associations.

Conclusions: A substantial minority of young, unmarried people form new sexual partnerships abroad, but these are typically with residents from the UK or other European countries. Those who have new partners abroad are likely to have higher-risk sexual lifestyles more generally, and to be at higher risk of sexually transmitted infections. Greater attention should be paid to sexual health promotion for travellers abroad, especially young travellers, emphasising the risks of new sexual relationships with compatriots as well as those from other countries in terms of STI/HIV acquisition and onwards transmission.

In 2005, UK residents made 66.4 million visits abroad, a number that had tripled since the mid-1980s.¹ A number of studies around the world have examined the frequency of overseas partner acquisition, with estimates of varying magnitude.² In the UK, genitourinary medicine clinic-based studies in the early 1990s showed that, of those people with a sexually transmitted infection (STI) who had travelled abroad in the preceding 3 months, 25% reported a new partner while away and two-thirds had used condoms inconsistently or not at all.³ A study of British holidaymakers in Tenerife, Canary Islands, in 2002 found that 35% reported sex with a non-regular partner while on holiday, and although men were no different from women with regard to reporting new partner(s), people aged 25 or younger were more likely to have new sexual partner(s) than those older than 25 (50% vs 22%).⁴ Between 2000 and 2002, Bellis *et al*⁵ asked visitors to the Balearic Island of Ibiza to complete a short, anonymous questionnaire on risk behaviours, just before they left the island. Over half of those surveyed reported sex with at least one new partner, with 26.2% of men and 14.5% of women having sex with multiple new partners, and that for over 90% of respondents, these new partners were UK residents. In this study, having sex abroad was also found to be associated with having more sexual partners in the 6 months before visiting the island.

These studies highlight the importance of understanding partner acquisition overseas, in terms of its prevalence and associated factors, so that sexual health promotion messages can be appropriately targeted and delivered. However, given the limited nature of these earlier studies, it is not possible to generalise their findings to the wider British population. In this

paper, using a probability sample of British residents, we measure the frequency of acquiring new sexual partners while travelling overseas (not just while on holiday as has been the focus of other studies^{3–4}), as well as exploring the geographic origin of these partners, the demographic and sexual and health behaviour characteristics associated with acquiring new sex partners abroad, and perceptions of HIV risk in different countries.

METHODS

The 2000 National Survey of Sexual Attitudes and Lifestyles ("Natsal 2000") is a stratified probability sample survey of the general population aged 16–44 years, resident in private households in Britain. A total of 11 161 people (6399 women and 4762 men) were interviewed between May 1999 and February 2001. Details of the methodology and wording of the questions are published elsewhere.^{6–7} Briefly, a sample of 40 523 addresses was selected from the small-user Postcode Address File for Britain with a multistage probability cluster design, with over-sampling in Greater London. Interviewers visited all selected addresses and recorded the number of residents aged 16–44 years. One resident from every household was invited by random selection to participate in the study. Trained interviewers conducted face-to-face interviews using computer-assisted personal interviewing (CAPI) in respondents' homes, followed by computer-assisted self-interview (CASI).

Abbreviations: CAPI, computer-assisted personal interviewing; CASI, computer-assisted self-interview; OR, odds ratio; STI, sexually transmitted infection

Computer-assisted interviewing has been shown in previous experiments to achieve lower rates of item non-completion and greater internal data consistency.⁸

To increase the number of respondents from ethnic minorities (black Caribbeans, black Africans, Indians and Pakistanis), an ethnic boost sample was obtained with stratified postcode sampling using 1991 Census data on the density of registered ethnic minority population at the end of the main survey, using a broadly similar methodology.⁹ Each household was screened to identify whether any resident was of black Caribbean, black African, Indian or Pakistani origin, and one person from each household was then randomly selected for interview. To facilitate communication with Indian and Pakistani respondents for whom English was not the first language, all study materials, including the face-to-face and self-completion questionnaires, were translated (and back-translated) into Punjabi and Urdu. Non-English self-completion questionnaires were provided in paper format (rather than as a CASI). Interviewers who could speak and read these languages were recruited and trained in survey procedures. Other people in the household were not used as interpreters for respondents whose English was insufficiently proficient.

The face-to-face interview included questions on sociodemographics, health, alcohol consumption and smoking, attitudes (including perceived HIV risk), sexual attraction and experience. Respondents who reported no sexual experience of any kind in the face-to-face interview, and those aged 16 and 17 years with some heterosexual experience but no heterosexual intercourse or same-sex experience reported in screening questions, were not given the CASI. In the CASI, eligible respondents were asked a range of questions about their sexual lifestyles and attitudes, including whether they had travelled overseas in the past 5 years. A positive response elicited further questions on whether respondents had had sex with partners for the first time while they were in any country outside the UK, the number of such partners, and in which countries these partners normally lived. Respondents were also asked (via CAPI) whether they thought people living in five particular countries (USA, Switzerland, the Netherlands, Thailand and Kenya) were more likely or less likely to become infected with HIV, relative to British residents.

Natsal 2000 achieved response rates of 65.4% and 63.0% for the main survey and ethnic boost sample, respectively,^{6, 7, 9} which is in line with other major surveys conducted in

Britain.^{10, 11} The population for this analysis comprises all respondents who had been resident in Britain for at least 5 years at the time of interview and who reported at least one sexual partner during this period: 4590 men (88.8% of 5168 men) and 6260 women (90.2% of 6942 women). For brevity, we refer to this group as “sexually active British residents” from now on.

All analyses were performed using STATA V.8.0 to account for stratification, clustering and weighting of the sample.^{7, 12} The data were weighted to correct for unequal selection probabilities and differential response rates, so that the weighted sample matches the age/sex profile of the British population for the 16–44 age range. We estimated the proportion of the population reporting new sexual partner(s) overseas in the past 5 years and the country of origin of these new partners. We used logistic regression to examine the association between reporting new partners overseas in the past 5 years and a number of sociodemographic and sexual and health behaviour factors. The crude and adjusted odds ratios (ORs) are given along with the corresponding 95% CI. The adjusted OR considers the association after the sociodemographic variables examined had been controlled for. Statistical significance is considered at $p < 0.05$ for all analyses.

We obtained ethical approval from University College Hospital, North Thames Multicentre Research Ethics Committee and Local Research Ethics Committees in Britain.

RESULTS

Proportion reporting sex with new partner(s) while overseas

Among sexually active British residents (see definition above), 13.9% of men and 7.1% of women reported having sex with new partner(s) while overseas in the past 5 years (table 1). Among sexually active British residents who reported new partners overseas, men reported larger partner numbers than women (median, 95th centile: 2, 13 vs 1, 5, respectively). These 1189 respondents with overseas partners, altogether, reported 14 191 partners in the past 5 years, of which 26.4% (95% CI 25.7% to 27.2%) were acquired overseas. Among all sexually active British residents, new partners acquired while overseas accounted for 10.6% (95% CI 10.2% to 11.0%) of men's partnerships and 5.1% (95% CI 4.7% to 5.5%) of women's partnerships in the past 5 years.

Table 1 Proportion reporting new sexual partner(s) while overseas in the past 5 years, and the number of new sexual partner(s) acquired while overseas, by gender

	Men	Women
% (95% CI) reporting new sexual partner(s) while overseas in the past 5 years		
1+ new partner(s) while overseas	13.9 (12.8 to 15.1)	7.1 (6.4 to 8.0)
2+ new partner(s) while overseas	7.7 (6.8 to 8.6)	2.4 (2.0 to 2.8)
5+ new partner(s) while overseas	2.5 (2.0 to 3.0)	0.5 (0.3 to 0.8)
Denominator*	5419, 4430	5304, 6057
Number of new sexual partners while overseas		
Mean (SD)	3.6 (13.2)	1.9 (4.9)
Median (range)	2 (1–300)	1 (1–100)
5th, 95th centiles	1, 13	1, 5
Denominator†	754, 725	378, 464

Natsal 2000 used the following definition of a “sexual partner” “people who have had sex together—whether just once, or a few times, or as regular partners, or as married partners,” and “sex” was defined as “this includes vaginal, oral and anal sexual intercourse”. Respondents read these terms and definitions at the start of the computer-assisted self-interview.

*Weighted, unweighted denominator defined as respondents who reported being resident in Britain for at least 5 years before interview for Natsal 2000, and who reported at least one sexual partner in the past 5 years.

†Weighted, unweighted denominator defined as respondents who reported being resident in Britain for at least five years before interview for Natsal 2000, and who reported at least one sexual partner in the past 5 years, and who reported new sex partner(s) while overseas.

Table 2 Proportion of men reporting new sexual partner(s) while overseas in the past 5 years by selected sociodemographics and sexual and health behaviours

	Row % (95% CI)	Crude OR (95% CI)	Adjusted OR (95% CI)	Denominator*
All men	13.9 (12.8 to 15.1)	—	—	5419, 4430
Age	p<0.001	p<0.001	p<0.001	
16–24	21.7 (18.9 to 24.8)	1.00	1.00	1254, 1010
25–34	16.3 (14.4 to 18.4)	0.70 (0.56 to 0.88)	1.18 (0.91 to 1.54)	2125, 1747
35–44	6.6 (5.6 to 7.9)	0.26 (0.20 to 0.33)	0.68 (0.49 to 0.94)	2040, 1673
Marital status	p<0.001	p<0.001	p<0.001	
Married	4.7 (3.7 to 6.0)	1.00	1.00	2328, 1599
Cohabiting	14.1 (11.6 to 17.1)	3.32 (2.39 to 4.63)	3.31 (2.35 to 4.66)	958, 643
Previously married	15.7 (11.7 to 20.8)	3.76 (2.46 to 5.76)	4.95 (3.18 to 7.70)	247, 321
Single, never married	24.9 (22.6 to 27.4)	6.71 (5.06 to 8.90)	6.95 (5.11 to 9.45)	1876, 1856
Ethnicity	p=0.603	p=0.561	p=0.078	
White	13.8 (12.6 to 15.1)	1.00	1.00	5040, 3769
Black Caribbean	13.4 (8.2 to 21.4)	0.97 (0.55 to 1.72)	0.78 (0.41 to 1.48)	95, 167
Black African	16.9 (10.2 to 26.7)	1.27 (0.71 to 2.29)	0.54 (0.30 to 0.99)	57, 152
Indian	9.7 (5.6 to 16.0)	0.67 (0.37 to 1.20)	0.73 (0.38 to 1.39)	68, 117
Pakistani	18.2 (9.8 to 31.5)	1.39 (0.67 to 2.90)	2.47 (0.95 to 6.41)	35, 111
Other	17.3 (10.1 to 28.1)	1.31 (0.69 to 2.47)	0.79 (0.36 to 1.74)	110, 102
Social class	p=0.548	p=0.558	p=0.280	
I/II	13.1 (11.4 to 15.0)	1.00	1.00	1884, 1570
III non-manual/manual	14.2 (12.4 to 16.2)	1.10 (0.88 to 1.37)	0.93 (0.71 to 1.21)	2220, 1767
IV/V/unemployed	12.7 (10.4 to 15.4)	0.96 (0.73 to 1.27)	0.76 (0.54 to 1.07)	978, 805
Place of residence in Britain	p<0.001	p<0.001	p<0.001	
Rest of Britain	12.8 (11.6 to 14.2)	1.00	1.00	4703, 3297
Greater London	21.0 (18.3 to 24.0)	1.81 (1.47 to 2.23)	1.65 (1.30 to 2.09)	716, 1133
Partner numbers, past 5 years	p<0.001	p<0.001	p<0.001	
1	1.8 (1.3 to 2.6)	1.00	1.00	2483, 1802
2–4	11.8 (10.0 to 13.9)	7.22 (4.79 to 10.9)	5.97 (3.58 to 9.97)	1594, 1379
5–9	31.7 (27.8 to 36.0)	25.1 (16.7 to 37.8)	20.0 (11.8 to 33.8)	768, 690
10+	50.9 (45.5 to 56.3)	56.2 (36.3 to 86.9)	44.8 (26.0 to 77.2)	521, 503
Same-sex partner(s), past 5 years	p<0.001	p<0.001	p<0.001	
No	13.4 (12.2 to 14.6)	1.00	1.00	5228, 4226
Yes	33.8 (25.9 to 42.7)	3.31 (2.25 to 4.88)	2.29 (1.48 to 3.55)	158, 172
Paid for sex, past 5 years	p<0.001	p<0.001	p<0.001	
No	12.1 (11.0 to 13.2)	1.00	1.00	5171, 4167
Yes	52.5 (45.1 to 59.8)	8.05 (5.92 to 11.0)	7.78 (5.35 to 11.3)	242, 255
STI diagnosis/es, past 5 years	p<0.001	p<0.001	p<0.001	
No	13.0 (11.9 to 14.2)	1.00	1.00	5058, 4103
Yes	35.3 (26.9 to 44.7)	3.66 (2.49 to 5.46)	2.79 (1.76 to 4.43)	160, 162
HIV test, past 5 years	p<0.001	p<0.001	p=0.001	
No	12.6 (11.4 to 13.8)	1.00	1.00	4644, 3701
Yes	23.5 (19.3 to 28.3)	2.14 (1.63 to 2.81)	1.70 (1.25 to 2.32)	428, 436

OR, odds ratio (adjusted OR, OR after adjustment for all sociodemographic factors); STI, sexually transmitted infection.

Natsal 2000 used the following definition of a “sexual partner” “people who have had sex together—whether just once, or a few times, or as regular partners, or as married partners,” and “sex” was defined as “this includes vaginal, oral and anal sexual intercourse”. Respondents read these terms and definitions at the start of the CASI.

*Weighted, unweighted denominator defined as men resident in Britain for at least 5 years who reported sexual partner(s) in the past 5 years.

Factors associated with reporting sex overseas

An increased likelihood of reporting sex abroad with a new partner in the past 5 years was significantly associated with a range of sociodemographic and behavioural factors including younger age, non-married status, ethnicity (women only), residence in London, higher reported numbers of sex partners, reporting same-sex partners, paying for sex (men only), reporting STI diagnosis/es and HIV testing, all in the past 5 years (tables 2 and 3). We found no significant association with social class.

One in five of those never married and aged under 25 reported sex with new partner(s) while overseas in the past 5 years (OR = 2.26 (95% CI 1.82 to 2.80) and 3.67 (95% CI 2.86 to 4.71) for men and women, respectively, compared with not being in this group). Particularly large odds of association were also observed for those men who reported paying for sex in the past 5 years (OR = 8.05, 95% CI 5.92 to 11.0) compared with those who had not. Partner numbers were also strongly associated with 82.6% of men and 63.2% of women who reported five or more partners in the past 5 years reporting new sex partner(s) abroad during this period. These associations were somewhat attenuated after adjustment for the socio-demographics in tables 2 and 3, yet all remained significant.

For both men and women there was a strong association between self-perceived HIV risk and reporting sex with new partner(s) while abroad: 10.1% (95% CI 7.7% to 13.1%) of men and 8.5% (95% CI 5.9% to 12.1%) of women who had sex abroad with new partner(s) described their HIV risk as being “great” or “quite a lot” compared with 3.7% (95% CI 3.1% to 4.4%) of men and 2.1% (95% CI 1.7% to 2.1%) of women who did not report new partner(s) overseas during this period ($p<0.001$). These associations remain highly significant, even after adjustment for partner numbers in the past 5 years: adjusted OR for men 2.29 (95% CI 1.55 to 3.39), adjusted OR for women 3.04 (95% CI 1.65 to 5.60).

Sexual mixing patterns

Of the 1189 respondents who reported forming new sexual partnership(s) while abroad, half did so with UK nationals, while approximately one-third reported that their new partner(s) were from other European Union countries (table 4). Although there were no significant gender differences in these proportions, men were more likely than women to report new partner(s) from North America (14.6% vs 8.0%, $p=0.0033$) and from Asian countries (6.7% vs 2.6%, $p<0.001$). In terms of acquiring sexual partners from other regions of relatively high

Table 3 Proportion of women reporting new sexual partner(s) while overseas in the past 5 years by selected sociodemographics and sexual and health behaviours

	Row % (95% CI)	Crude OR (95% CI)	Adjusted OR (95% CI)	Denominator*
All women	7.1 (6.4 to 8.0)	—	—	5304, 6057
Age	p<0.001	p<0.001	p<0.001	
16–24	14.5 (12.3 to 17.0)	1.00	1.00	1213, 1183
25–34	7.4 (6.4 to 8.6)	0.47 (0.37 to 0.61)	0.80 (0.58 to 1.10)	2085, 2507
35–44	2.4 (1.9 to 3.0)	0.14 (0.10 to 0.20)	0.33 (0.22 to 0.50)	2005, 2374
Marital status	p<0.001	p<0.001	p<0.001	
Married	2.0 (1.5 to 2.7)	1.00	1.00	2497, 2526
Cohabiting	7.2 (5.7 to 9.1)	3.78 (2.54 to 5.61)	2.85 (1.87 to 4.34)	1042, 998
Previously married	7.8 (5.8 to 10.3)	4.09 (2.67 to 6.28)	5.21 (3.34 to 8.13)	407, 688
Single, never married	16.3 (14.3 to 18.6)	9.48 (6.73 to 13.3)	6.06 (4.07 to 9.01)	1353, 1839
Ethnicity	p=0.002	p=0.006	p=0.010	
White	6.9 (6.2 to 7.8)	1.00	1.00	4939, 5154
Black Caribbean	12.0 (7.5 to 18.7)	1.84 (1.09 to 3.10)	1.46 (0.76 to 2.84)	100, 306
Black African	3.1 (1.4 to 7.0)	0.43 (0.18 to 1.02)	0.34 (0.12 to 0.98)	45, 188
Indian	6.6 (3.3 to 12.8)	0.95 (0.45 to 1.99)	1.31 (0.51 to 3.41)	85, 155
Pakistani	6.6 (2.8 to 14.8)	0.95 (0.38 to 2.35)	2.38 (0.81 to 7.01)	31, 118
Other	14.8 (8.8 to 23.8)	2.34 (1.28 to 4.28)	2.53 (1.17 to 5.48)	91, 124
Social class	p=0.736	p=0.736	p=0.330	
I/II	6.6 (5.5 to 8.0)	1.00	1.00	1462, 1736
III non-manual/manual	7.3 (6.2 to 8.5)	1.11 (0.85 to 1.45)	1.22 (0.89 to 1.68)	2173, 2431
IV/V/unemployed	6.8 (5.3 to 8.5)	1.02 (0.74 to 1.41)	1.33 (0.89 to 1.99)	1087, 1217
Place of residence in Britain	p<0.001	p<0.001	p=0.007	
Rest of Britain	6.6 (5.8 to 7.5)	1.00	1.00	4621, 4568
Greater London	10.7 (8.9 to 12.8)	1.70 (1.33 to 2.17)	1.47 (1.11 to 1.94)	683, 1489
Partner numbers, past 5 years	p<0.001	p<0.001	p<0.001	
1	1.6 (1.2 to 2.1)	1.00	1.00	3152, 3440
2–4	9.5 (7.9 to 11.2)	6.63 (4.69 to 9.37)	4.59 (3.02 to 6.99)	1456, 1814
5–9	22.9 (18.7 to 27.6)	18.8 (12.7 to 27.9)	11.6 (7.01 to 19.0)	444, 517
10+	40.3 (33.2 to 47.8)	42.8 (28.1 to 65.3)	28.9 (17.0 to 49.0)	201, 225
Same-sex partner(s), past 5 years	p<0.001	p<0.001	p<0.001	
No	6.6 (5.9 to 7.5)	1.00	1.00	5120, 5827
Yes	23.0 (16.9 to 30.5)	4.20 (2.79 to 6.33)	2.74 (1.74 to 4.33)	157, 195
STI diagnosis/es, past 5 years	p<0.001	p<0.001	p<0.001	
No	6.6 (5.9 to 7.5)	1.00	1.00	4895, 5542
Yes	18.2 (13.4 to 24.2)	3.14 (2.13 to 4.62)	2.20 (1.43 to 3.38)	210, 268
HIV test, past 5 years	p<0.001	p<0.001	p<0.001	
No	6.5 (5.7 to 7.4)	1.00	1.00	4572, 5049
Yes	15.3 (12.0 to 19.4)	2.61 (1.90 to 3.58)	2.57 (1.83 to 3.61)	394, 598

OR, odds ratio (adjusted OR, OR after adjustment for all sociodemographic factors); STI, sexually transmitted infection.

Natsal 2000 used the following definition of a “sexual partner” “people who have had sex together—whether just once, or a few times, or as regular partners, or as married partners,” and “sex” was defined as “this includes vaginal, oral and anal sexual intercourse”. Respondents read these terms and definitions at the start of the CASI.

*Weighted, unweighted denominator defined as women resident in Britain for at least 5 years who reported sexual partner(s) in the past 5 years.

Table 4 Country/region of residence of respondents' new partner(s) acquired while overseas in the past 5 years, by gender

Country/region	Men	Women	p Value
United Kingdom	48.9 (44.4 to 53.4)	50.7 (45.4 to 56.0)	0.605
Other European Union country/ies	39.1 (34.8 to 43.6)	33.5 (28.6 to 38.7)	0.093
Australia/New Zealand	7.5 (5.6 to 10.1)	6.8 (4.6 to 9.9)	0.663
North America	14.6 (11.8 to 18.0)	8.0 (5.7 to 11.1)	0.003
South America	3.5 (2.2 to 5.5)	2.6 (1.3 to 5.3)	0.524
Caribbean	3.9 (2.4 to 6.2)	4.1 (2.5 to 6.5)	0.891
Asia	6.7 (5.3 to 9.2)	2.6 (1.6 to 4.4)	<0.001
Middle East	1.7 (0.8 to 3.6)	2.7 (1.6 to 4.7)	0.325
Sub-Saharan Africa	3.0 (1.8 to 4.7)	2.6 (1.6 to 4.2)	0.685
Other	2.5 (1.4 to 4.2)	6.4 (4.1 to 9.9)	0.005
Denominator*	754, 725	378, 464	

Natsal 2000 used the following definition of a “sexual partner” “people who have had sex together—whether just once, or a few times, or as regular partners, or as married partners,” and “sex” was defined as “this includes vaginal, oral and anal sexual intercourse”. Respondents read these terms and definitions at the start of the CASI. Values are percentages (95% CI). Percentages do not sum to 100% because respondents could report new partners from more than one country/region.

*Weighted, unweighted denominator defined as those who reported new sexual partner(s) while outside of the UK in the 5 years before interview for Natsal 2000, who had been resident in Britain for at least the 5 years before interview and who reported sexual partner(s) in the past 5 years.

Table 5 Perceived risk of HIV infection for people living in selected countries described as "somewhat" or "much more likely" than Britain, by gender

Country	Men	Women	p Value
USA	60.9 (59.3 to 62.6)	56.4 (54.9 to 57.9)	<0.001
Switzerland	8.4 (7.5 to 9.4)	9.9 (9.1 to 10.8)	0.014
Kenya	88.2 (87.0 to 89.2)	79.4 (78.1 to 80.7)	<0.001
The Netherlands	48.8 (47.1 to 50.6)	41.3 (39.8 to 42.8)	<0.001
Thailand	89.7 (88.6 to 90.8)	81.3 (80.1 to 82.4)	<0.001
Denominator*	5576, 4590	5448, 6260	–

Values are percentage (95% CI).

*Weighted, unweighted denominator defined as those who reported new sexual partner(s) while outside of the UK in the 5 years before interview for Natsal 2000, who had been resident in Britain for at least the 5 years before interview.

HIV prevalence, fewer than 5% of the 1189 respondents reported new partner(s) from sub-Saharan Africa, the Caribbean or South America.

Perceived risk of HIV infection for people living in other countries

Relative to women, men perceived HIV risk as greater for people living in four of the five countries shown in table 5 than for people living in Britain. Nevertheless, over half of men and women considered the risk of HIV infection "somewhat more likely" or "much more likely" for people living in the USA, relative to Britain. Fewer than one in ten respondents perceived HIV risk in Switzerland in this way, yet almost half of respondents considered the risk of HIV for people living in the Netherlands as more likely than in Britain. Approximately four out of five respondents considered the risk of HIV infection "somewhat more likely" or "much more likely" for people living in Kenya or Thailand.

DISCUSSION

Our data from a national probability survey show that a substantial minority proportion of the sexually active, resident British population have new sexual partners while overseas, with twice as many men as women reporting doing so, and with men reporting a greater number of partners than women. In addition to gender, partner acquisition overseas is associated with a range of sociodemographic and behavioural characteristics. Of particular note is the large proportion of never married young people who acquire new partners while overseas, as others have noted.^{2 3 5 13} Reporting of higher numbers of sexual partners by men has been observed in many studies.¹⁴ In the context of partners overseas, this may relate to gender differences in the opportunity for travel overseas, and men being more likely than women to pay for sex, but may also be in part due to gender-linked reporting bias or sampling bias,¹⁵ as well as to possible under-representation of sex workers in probability surveys.¹⁶

In common with these other studies, we also found a marked association between an individual's likelihood of reporting acquiring new partners abroad and their patterns of sexual risk behaviours at home, especially their reported numbers of sex partners.^{2 3 5 13} Acquiring new sex partners abroad may therefore be part of a wider spectrum of high-risk sexual activity in which those who are highly sexually active at home (whether with opposite-sex or same-sex partners) are more likely to continue this behaviour while overseas. This is also evident from the strong and independent association between reporting new partners overseas and the increased likelihood of reporting STI diagnosis/es and HIV testing.

Our data suggest that partner acquisition overseas, at least among those resident in Britain, appears to be largely assortative, with a large proportion of individuals reporting sex with others who originate from the UK and/or other

European Union countries, in common with some studies.^{5 13 17}

This, in part, reflects travel trends as, for example, over three-quarters of overseas travel by UK residents in 2005 was to European destinations.¹ However, this may also reflect how people perceive HIV risk in different countries, which as our study showed, varies considerably.

At the individual level, the sexual health risks associated with acquiring new sex partners abroad depend on numerous factors, including the prevalence, patterns and distribution of high-risk sexual behaviour (in turn influenced by many sociodemographic factors including age, marital status and sexual orientation), and the background prevalence of disease of the new partner's country of residence. The assortative nature of sexual mixing when abroad suggests that, although HIV transmission risk may be relatively low in Europe, the risk of acquiring more common bacterial STIs (eg, genital chlamydial infection or gonorrhoea) may be greater given recent rising trends in STI diagnoses in Britain and other European countries.^{18 19} Consequently, sexual health interventions targeting British travellers, especially the young and those who have multiple partners at home, should include information on the risk of having sex with compatriots as well as the STI/HIV prevalence in the local population or sex industry of foreign destinations.

Our study has several limitations. As a general population study, robust estimates are not readily available for individuals who are likely to be at high HIV and STI transmission risk (eg, injecting drug users and sex workers), and among whom these risk behaviours may have a disproportionate contribution to disease transmission. Further detailed studies of these groups are required. Using cross-sectional survey data, we could identify associations between factors but we could not determine causality, including the ordering of events—for example, we could not link STI acquisition with new partner acquisition or paying for sex while overseas. Finally, as our study was limited to people aged 16–44, our results are not generalisable to older people, among whom overseas travel is also increasing.

In conclusion, HIV prevention interventions, such as safer sex promotion and HIV testing, have traditionally been targeted at migrants arriving from countries with high HIV prevalence,²⁰ and STI/HIV interventions targeting Britons travelling overseas remain relatively underdeveloped. The results from this national probability survey support recent calls by the travel industry and medical specialists for proactive safer sex promotion and risk reduction counselling,^{5 21} especially for young people on package holidays as well as those travelling overseas for longer periods, such as gap year students and young people working in holiday resorts. Health professionals should make the most of opportunities to reinforce safer sex messages among those who visit general practitioners or travel clinics for travel advice, as well as among people who are seen for STI or HIV care and are planning to travel abroad. This

Key messages

- Data from this national probability survey suggest that a substantial minority of young, unmarried people form new sexual partnerships abroad, but these are typically with residents from the UK or other European countries.
- Those who have new partners while abroad are likely to have higher-risk sexual lifestyles generally and be at higher risk of STIs.
- Greater attention should be paid to sexual health promotion for travellers abroad, especially young travellers, emphasising the risks of new sexual relationships with compatriots as well as those from other countries in terms of STI/HIV acquisition and onwards transmission.

travel advice needs to include information on safer sex and the risks of sex abroad with compatriots as well as those of other nationalities in terms of STI/HIV acquisition and onward transmission.

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CONTRIBUTORS

CM undertook the statistical analyses, with contributions from AC, and redrafted the paper for publication. KF wrote the initial draft of the paper and participated in the design and management of the main Natsal study with AJ, KW and BE. All authors contributed to the drafting of the paper.

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