

Attitudes and first heterosexual experiences among Indians and Pakistanis in Britain: evidence from a national probability survey

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Summary: We compare attitudes, experiences of learning about sex and first intercourse among Indians ($n = 393$) and Pakistanis ($n = 365$) using a probability survey of Britain's general population aged 16–44 years conducted during 1999–2001 ($n = 12,110$). Higher proportions of Pakistanis (64.6%) and Indians (28.1%) reported religion as 'very important' versus 6.2% of other ethnicities. Pakistanis were more conservative in their attitudes, e.g. reporting premarital sex as wrong (adjusted odds ratios [AORs] for sociodemographic differences, 4.71 [men] and 6.59 [women]). Pakistanis were more likely to be married at first sex (AORs 6.2 [men] and 9.53 [women]), yet men were more likely than women to be in non-marital relationships at this time (69.4% versus 25.2%). Pakistani men and women and Indian women were more likely to report *not* using reliable contraception at first sex relative to others (AORs 2.33, 3.16 and 1.90, respectively). Pakistani and Indian women were more likely than others to report school lessons as their main source of sex education (AORs 2.23 and 1.77) and *not* discussing sex with their parents during adolescence (AORs 2.04 and 2.62). These unique data have implications for ensuring that sex and relationship education and health promotion messages are appropriately planned, targeted and delivered to benefit Pakistanis and Indians.

Keywords: ethnicity, Pakistani, Indian, sexual health, Britain

INTRODUCTION

Indians and Pakistanis are the largest ethnic minority groups in Britain, representing 28% and 16% of the non-white population, respectively.¹ However, relative to other ethnic minority groups, a paucity of sexual health research has been undertaken among Indians and Pakistanis.^{2–4} This may, in part, be due to the reluctance of researchers to explore issues that are culturally taboo among South Asian communities and thus extremely sensitive.

A limitation to some studies is the collation of those of Pakistani, Indian and Bangladeshi origin under the broad term 'South Asian'.^{5–9} Although sometimes unavoidable due to small sample sizes, this categorization masks the heterogeneity of behaviours, cultures and beliefs that may exist between and within ethnic groups. Furthermore, some studies have been characterized by convenience samples and/or work in specific geographical locations.¹⁰ In contrast, the second National Survey of Sexual Attitudes and Lifestyles (Natsal-2), a large national probability sample survey of the British

general population, oversampled the UK's four largest ethnic minority groups, thus permitting robust estimates of key behavioural and attitudinal parameters to be calculated for those of Pakistani, Indian, Black Caribbean and Black African origin.¹¹

Previous analyses of Natsal-2 have found that Pakistanis and Indians, relative to other ethnic groups, have a low prevalence of sexual risk behaviours, including reporting a later age at first sex and fewer partners, and were less likely to report having had sexually transmitted infections (STIs) diagnosed.¹² In an attempt to understand these findings and to explore factors identified in smaller surveys and qualitative studies,^{7,9,10,13} this paper examines the Natsal-2 data collected on attitudes, learning about sex and first sexual experiences, comparing Pakistani and Indian respondents to respondents of other ethnicities, and to one another.

METHODS

Natsal-2 is a stratified probability sample survey of the general population aged 16–44 years, resident in Britain. In total, 11,161 people (6399 women, 4762 men) were interviewed between May 1999 and February 2001. Methodology details are published elsewhere.^{14,15} Briefly, a sample of 40,523 addresses was selected from the small-user Postcode Address File for

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Britain with a multistage probability cluster design, with oversampling in Greater London. Interviewers visited selected addresses and recorded the number of residents aged 16–44 years. One resident from every household was invited by random selection to participate. Parental permission was requested for respondents aged 16–17 years. Trained interviewers conducted face-to-face interviews using computer-assisted personal interviewing (CAPI) in respondents' homes, followed by computer-assisted self-interview (CASI). In prior experiments computer-assisted interviewing achieved lower rates of item non-response and greater internal data consistency than using pen-and-paper questionnaires.¹⁶

To ensure robust estimates for Indian, Pakistani, black Caribbean and black African ethnic minority groups, an ethnic minority boost sample was also obtained ($n = 949$). The sample design was broadly similar to that for the main survey and involved stratifying postcode sectors based on the proportion of ethnic minority residents using data from the 1991 Census of Population.¹² To facilitate communication with respondents for whom English was not the first language, all study materials were translated into Urdu and Punjabi. Interviewers who could speak the translated languages were recruited and trained in survey procedures. Other household individuals were not used as interpreters.

Questions on first intercourse were confined to occurrence at age 13 years or older to avoid probing non-consensual early experiences. Respondents were asked to reflect on their willingness and that of their partner, the timing of the event, contraceptive use and the nature of the relationship at that time. Respondents who reported not being married at first sex were asked what, at the time, was the main reason for first intercourse. Respondents were also asked to report their main source of sexual information, communication with parents about sex when they were adolescents and a number of attitudinal questions.

The University College Hospital and North Thames Multi-Centre Research Ethics Committee and all the Local Research Ethics Committees in Britain approved the Natsal-2 study.

Response rates of 65.4% and 63.0% were achieved for the main survey and ethnic boost sample, respectively,^{12,14,15} which is in line with other major British surveys.¹⁷ All analyses were carried out in STATA 9.0 to account for sample stratification, clustering and weighting.^{15,18} 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 age range 16–44 years. As in previous publications,^{12,19} we used binary logistic regression to examine the association between the outcomes of interest, i.e. being of Pakistani or Indian origin, and factors associated with learning about sex and the first sexual experience. We present adjusted odds ratios (AOR) for key sociodemographics, and where appropriate, age at first intercourse. Statistical significance is considered as $P < 0.05$ for all analyses.

RESULTS

Sociodemographic characteristics of the samples

Pakistani and Indian respondents were younger on average than respondents of other ethnicities: median ages of 28, 30 and 32 years, respectively; no significant gender differences.

Table 1 shows that around half of Pakistani and Indian respondents were married, but cohabitation was relatively rare, reported by less than 5% in these groups versus 15–20% of those of other ethnicities. Nearly all Pakistani men and women reported being Muslim, while a small proportion of Indian respondents did (around 1 in 10). The most prevalent religion reported by Indians was Hinduism (reported by almost half of these respondents), and then Sikhism (reported by around 1 in 5 Indian respondents). Approximately one in five Pakistanis stated they had no qualifications, but there were no significant social class differences between Pakistanis and non-Pakistanis. In contrast, few Indians reported no qualifications at all; instead, three in 10 Indian respondents reported having a degree. Approximately half of Indian and Pakistani respondents were born outside of the UK, with similar proportions reporting to have moved to the UK either before the age of 16 years or when they were older than age 16 years.

Attitudinal perspectives

Respondents were asked 'how important are religion and religious beliefs to you, now?' A larger proportion of Pakistani men and women than their Indian counterparts reported 'very important' (Table 2); among men: 58.2% versus 33.9%; among women: 71.3% versus 22.5%. These estimates compare with less than one in 10 respondents of other ethnicities.

In terms of attitudes towards sex before marriage, approximately three-quarters of Pakistani respondents reported this as 'always, mostly or sometimes wrong', in contrast to less than half of Indians, and less than a sixth of respondents from other ethnic groups. After adjusting for sociodemographic differences, the AORs for reporting this attitude were 4.71 and 6.59 for Pakistani men and women, respectively. A larger proportion of respondents in the two ethnic groups of interest reported abortion as 'always, mostly or sometimes wrong', but again Pakistanis were more likely to do so: AORs 2.70 and 4.27 for men and women, respectively.

Contextual factors around first sex

As reported previously,¹² the median age at first intercourse for Pakistani and Indian respondents was significantly later than estimated for the population as a whole;¹⁹ among men: aged 20 years for Pakistanis and Indians versus 17 years for all respondents; among women: 22 years for Pakistanis, 21 years for Indians and 17 years for all respondents. This later average age is reflected in the finding that 30.6% of Pakistani men and 28.2% of Indian men reported being married at first sex, in comparison to 1.4% of both non-Pakistanis and non-Indians (Table 3a). Among women, although larger than the estimate for non-Indians (3.2%), Indian women were less likely than Pakistani women to be married at first sex (45.8% versus 74.8%, Table 3b). The corollary of this is that Pakistani men, and to some extent (although not statistically significant) Indian men, were more likely than women to report having been in a *non-marital* relationship at first sex.

The majority of Pakistanis and Indians reported high levels of readiness (in that they did not regret the timing of first intercourse) and consensuality (in terms of willingness to have sex on this first occasion), and no differences were found when compared with people of other ethnicities. Pakistani men and

Table 1 Sociodemographic characteristics of sample, by gender: a comparison of Pakistanis, Indians and the general population

	Men				Women			
	All men % (95% CI)	Pakistani % (95% CI)	Indian % (95% CI)	<i>P</i> value*	All women % (95% CI)	Pakistani % (95% CI)	Indian % (95% CI)	<i>P</i> value†
Denominator‡,§	5168	177	171		6942	188	222	
Age (years)		<i>P</i> < 0.0001	<i>P</i> = 0.101	0.188		<i>P</i> = 0.237	<i>P</i> = 0.225	
16–24	26.7 (25.1–28.4)	49.0 (38.4–59.5)	36.0 (26.0–47.3)		26.0 (24.7–27.4)	40.5 (31.5–50.2)	30.1 (21.9–40.2)	0.1619
25–34	37.4 (35.9–39.0)	27.0 (20.0–35.3)	37.0 (28.0–47.0)		37.5 (36.1–39.0)	40.1 (31.6–49.3)	40.7 (32.4–49.6)	
35–44	36.0 (34.4–37.4)	24.2 (16.2–34.4)	27.0 (18.4–37.8)		36.5 (35.2–38.0)	19.4 (13.0–28.9)	29.0 (22.1–37.1)	
Marital status		<i>P</i> = 0.001	<i>P</i> = 0.0001	0.554		<i>P</i> = 0.0001	<i>P</i> = 0.0001	
Single	39.2 (37.5–40.8)	41.6 (31.6–52.2)	44.1 (34.0–54.7)		29.6 (28.2–31.1)	35.6 (26.5–50.0)	31.8 (23.4–41.6)	0.0583
Married	40.0 (38.3–41.7)	53.6 (43.3–63.6)	51.3 (40.8–61.7)		44.5 (43.0–46.0)	55.5 (45.6–65.0)	60.5 (51.0–69.2)	
Cohabiting	16.5 (15.3–17.8)	3.7 (1.1–11.6)	1.7 (0.5–5.9)		18.2 (17.1–19.3)	0.7 (0.2–2.9)	4.6 (1.7–11.4)	
Previously married**	4.4 (3.9–5.0)	1.1 (0.5–2.4)	2.8 (1.3–6.0)		7.7 (7.1–8.3)	8.2 (5.3–12.3)	3.2 (1.7–6.0)	
Religion		<i>P</i> < 0.0001	<i>P</i> < 0.0001	0.0001		<i>P</i> < 0.0001	<i>P</i> < 0.0001	< 0.0001
Muslim	2.2 (1.8–2.6)	97.5 (94.6–98.9)	7.9 (4.1–14.9)		2.2 (1.8–2.6)	96.4 (89.1–98.9)	13.0 (7.8–29.8)	
Hindu	0.9 (0.6–1.3)	0	44.1 (33.4–55.0)		1.0 (0.7–1.3)	0	45.2 (35.7–54.9)	
Sikh	0.4 (0.2–0.6)	0	19.0 (11.9–28.8)		0.5 (0.3–0.8)	0.7 (0.2–3.0)	23.5 (15.4–34.1)	
Christian/other	36.6 (34.9–38.3)	0.2 (< 0.1–1.4)	12.6 (6.7–22.4)		46.3 (44.8–47.8)	0	4.4 (2.0–9.4)	
None	60.0 (58.2–61.7)	2.3 (1.0–5.3)	16.5 (9.5–27.0)		50.1 (48.6–51.6)	2.8 (0.7–11.0)	14.0 (8.7–21.7)	
Social class		<i>P</i> = 0.193	<i>P</i> = 0.135	0.028		<i>P</i> = 0.386	<i>P</i> = 0.177	0.386
I/II	36.2 (34.4–38.1)	26.5 (17.9–37.5)	46.7 (35.5–58.4)		30.6 (29.0–32.1)	29.4 (18.8–42.9)	39.1 (28.9–50.5)	
IIINM/IIIM	43.4 (41.7–45.1)	51.1 (39.8–62.4)	35.5 (25.6–46.8)		45.8 (44.3–47.4)	46.3 (33.7–59.5)	42.2 (32.2–52.8)	
IV/V/unemployed	20.4 (19.0–21.9)	22.4 (14.9–32.1)	17.8 (11.6–26.3)		23.6 (22.2–25.1)	24.2 (15.6–35.6)	18.7 (12.4–27.2)	
Highest level of education		<i>P</i> = 0.473	<i>P</i> = 0.001	0.001		<i>P</i> = 0.027	<i>P</i> = 0.006	
Degree (or higher)	21.4 (19.9–23.0)	17.7 (11.7–25.9)	32.8 (23.9–43.1)		17.5 (16.3–18.8)	17.0 (10.2–26.9)	29.2 (21.5–38.3)	0.004
A-level	14.3 (13.1–15.6)	16.2 (9.8–25.6)	17.6 (11.4–26.2)		16.1 (15.0–17.3)	28.8 (20.6–38.6)	16.6 (10.3–25.7)	
GCSE/O-level/equivalent	47.3 (45.5–49.1)	44.1 (34.1–54.6)	43.7 (33.9–54.1)		49.8 (48.3–51.4)	32.5 (25.6–40.3)	43.7 (34.4–53.5)	
None	17.0 (15.6–18.5)	22.0 (15.1–30.8)	5.9 (3.4–10.0)		16.6 (15.4–17.8)	21.8 (15.4–30.0)	10.5 (6.7–16.1)	
Born in the UK		<i>P</i> < 0.0001	<i>P</i> < 0.0001	0.237		<i>P</i> < 0.0001	<i>P</i> < 0.0001	0.237
Born in the UK	91.6 (90.8–92.4)	56.1 (45.9–65.9)	50.6 (40.3–61.0)		91.8 (91.0–92.5)	63.6 (54.1–72.1)	53.5 (44.3–62.6)	
Moved to UK aged ≤ 16 years old	3.5 (3.0–4.1)	20.2 (13.7–28.8)	22.2 (15.6–30.7)		3.5 (3.1–4.0)	20.0 (13.8–28.1)	22.1 (15.7–30.2)	
Moved to UK aged > 16 years old	4.8 (4.3–5.5)	23.7 (16.6–32.5)	27.1 (19.1–37.0)		4.7 (4.2–5.3)	16.4 (10.7–24.4)	24.3 (17.9–32.3)	

CI = confidence interval; GCSE = General Certificate of Secondary Education

**P* value for difference between Pakistani and Indian men. *P* values in previous columns refer to the difference between men in the specific ethnic groups and men of other ethnicities

†*P* value for difference between Pakistani and Indian women. *P* values in previous columns refer to the difference between women in the specific ethnic groups and women of other ethnicities

‡Unweighted denominators; weighted percentages

§Denominator is all respondents aged 16–44 years

**Divorced, separated and widowed

women were however more likely to report *not* having used reliable contraception at first sex compared with others (AORs 2.33 and 3.16, respectively). This result was also observed for Indian women (only), AOR 1.90.

Source and adequacy of sexual information

Pakistani women were more likely to report learning about sex from lessons at school than women not of their ethnicity (AOR 2.23, Table 4b). While learning about sex from

Table 2 Comparing Pakistani, Indian and the general population's attitudes towards religion, premarital sex and abortion, by gender

Men	All men % (95% CI)	Pakistani % (95% CI)	Indian % (95% CI)	P value for difference between Pakistanis and Indians*	Adjusted OR [†] (95% CI) Pakistani versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus Pakistani (ref.)
Denominator ^{‡,§}	5168	177	171	–	–	–	–
Importance of religion		<i>P</i> < 0.0001	<i>P</i> < 0.0001	<i>P</i> = 0.001	<i>P</i> < 0.0001	<i>P</i> = 0.806	<i>P</i> = 0.008
Very important	6.6 (5.9–7.4)	58.2 (47.1–68.4)	33.9 (24.5–44.8)		4.20 (2.50–7.03)**	0.92 (0.48–1.77)**	0.39 (0.20–0.78)**
Quite important	14.9 (13.8–16.1)	22.4 (15.2–31.8)	21.0 (14.2–29.8)				
Not very important	40.0 (38.4–41.6)	17.2 (9.6–29.1)	33.5 (23.9–44.6)				
Not at all important	38.5 (36.8–40.2)	2.2 (0.9–5.2)	11.7 (6.7–19.6)				
Attitude towards sex before marriage:		<i>P</i> < 0.0001	<i>P</i> < 0.0001	<i>P</i> = 0.0006	<i>P</i> < 0.0001	<i>P</i> = 0.475	<i>P</i> = 0.003
Always/mostly/sometimes wrong	13.8 (12.7–15.0)	72.3 (62.0–80.6)	46.7 (36.8–56.9)		4.71 (2.81–7.89)	1.22 (0.71–2.08)	0.33 (0.16–0.68)
Attitude towards abortion:		<i>P</i> = 0.0001	<i>P</i> = 0.0005	<i>P</i> = 0.269	<i>P</i> = 0.083	<i>P</i> = 0.107	<i>P</i> = 0.473
Always/mostly/sometimes wrong	75.9 (74.5–77.3)	95.1 (87.2–98.2)	90.6 (83.2–94.9)		2.70 (0.88–8.30)	1.82 (0.88–3.76)	0.65 (0.20–2.13)
Women	All women % (95% CI)	Pakistani % (95% CI)	Indian % (95% CI)	P value for difference between Pakistanis and Indians	Adjusted OR [†] (95% CI) Pakistani versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus Pakistani (ref.)
Denominator ^{‡,§}	6942	188	222	–	–	–	–
Importance of religion		<i>P</i> < 0.0001	<i>P</i> < 0.0001	<i>P</i> < 0.0001	<i>P</i> < 0.0001	<i>P</i> = 0.011	<i>P</i> < 0.0001
Very important	7.9 (7.2–8.6)	71.3 (63.5–78.1)	22.5 (16.6–29.7)		10.6 (6.99–16.2)**	0.53 (0.33–0.86)**	0.09 (0.04–0.16)**
Quite important	20.5 (19.4–21.7)	18.9 (13.4–26.0)	33.5 (25.9–42.1)				
Not very important	43.0 (41.6–44.4)	7.1 (4.3–11.4)	29.3 (21.7–38.2)				
Not at all important	28.7 (27.3–30.1)	2.7 (0.6–11.2)	14.7 (8.4–25.6)				
Attitude towards sex before marriage:		<i>P</i> < 0.0001	<i>P</i> < 0.0001	<i>P</i> < 0.0001	<i>P</i> < 0.0001	<i>P</i> = 0.825	<i>P</i> < 0.0001
Always/mostly/sometimes wrong	14.6 (13.6–15.6)	78.2 (69.1–85.2)	45.9 (37.1–55.0)		6.59 (3.89–11.2)	1.05 (0.67–1.67)	0.20 (0.10–0.40)
Attitude towards abortion:		<i>P</i> < 0.0001	<i>P</i> = 0.0065	<i>P</i> = 0.017	<i>P</i> = 0.002	<i>P</i> = 0.562	<i>P</i> = 0.005
Always/mostly/ sometimes wrong	74.3 (73.0–75.5)	95.4 (88.9–98.2)	85.4 (77.6–90.9)		4.27 (1.69–10.8)	1.18 (0.67–2.07)	0.22 (0.08–0.63)

CI = confidence interval; OR = odds ratio

**P* value for difference between Pakistanis and Indians. As in Table 1, *P* values in previous two columns refer to the difference between respondents in the specific ethnic groups and respondents of other ethnicities

†OR adjusted for the sociodemographic variables shown in Table 1

‡Unweighted denominators; weighted percentages

§Denominator is all respondents aged 16–44 years

**Adjusted OR of reporting importance of religion as 'very important' versus all other response options

parent(s) was not commonly reported overall (6.4% of all men and 17.5% of all women), this was even less so among respondents of Pakistani and Indian origin. Related to this is the finding that Pakistani men and women and Indian women were more likely than other respondents to report that they did not discuss sex with their parents during adolescence (AORs 6.41, 2.04 and 2.62, respectively, Table 4a and 4b).

Overall, the majority of respondents (3 in 4) felt that they had needed more information about sex when they had first had sexual intercourse. While a smaller proportion of Pakistani men and women reported this need (69.7% versus 78.7% of all men, and 62.8% versus 78.5% of all women), this was not statistically significant after adjusting for sociodemographic differences or age at first intercourse.

Table 3 Circumstances of first sex: a comparison of Pakistanis, Indians and the general population: (a) men and (b) women

	All men % (95% CI)	Pakistani % (95% CI)	Indian % (95% CI)	P value*	Adjusted OR [†] (95% CI) Pakistani versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus Pakistani (ref.)
(a) Men							
Denominator ^{‡,§}	4610	139	143	–	–	–	–
Status of partnership		<i>P</i> < 0.0001	<i>P</i> < 0.0001	0.048	<i>P</i> < 0.0001	0.364	<i>P</i> = 0.366
Married	1.8 (1.4–2.3)	30.6 (20.5–42.9)	28.2 (19.3–39.0)		6.20 (2.12–18.2)**	1.61 (0.58–4.49)**	0.55 (0.15–2.05)**
Engaged	0.7 (0.4–1.0)	2.5 (0.7–8.8)	0.6 (<0.1–4.2)				
Cohabiting but not married	0.2 (0.1–0.4)	1.1 (0.3–4.5)	0.4 (<0.1–3.1)				
Steady relationship	43.1 (41.6–44.6)	18.5 (10.8–29.8)	30.4 (21.7–40.7)				
Known for a while but not steady relationship	32.9 (31.4–34.4)	18.9 (12.3–27.9)	27.0 (18.9–36.9)				
Recently met	14.7 (13.6–15.9)	14.9 (8.1–25.6)	10.1 (4.9–19.4)				
Met for first time	5.2 (4.5–6.0)	11.6 (5.3–23.5)	3.4 (1.5–7.4)				
Knew well/for long time	0.5 (0.4–0.9)	1.5 (0.3–5.9)	0				
Other	0.9 (0.7–1.3)	0.6 (<0.1–4.3)	0				
Timing		<i>P</i> = 0.4270	<i>P</i> = 0.669	0.319	<i>P</i> = 0.150	<i>P</i> = 0.791	<i>P</i> = 0.308
Wish waited longer	16.7 (15.5–18.0)	21.5 (14.4–30.8)	13.2 (7.2–22.9)		1.74 (0.82–3.68) ^{††}	1.11 (0.51–2.42) ^{††}	0.58 (0.21–1.65) ^{††}
About the right time	76.3 (74.8–77.6)	72.0 (61.6–80.5)	79.9 (70.3–86.9)				
Should not have waited so long	7.1 (6.3–7.9)	6.5 (3.2–12.7)	7.0 (3.3–14.1)				
Willingness		<i>P</i> = 0.088	<i>P</i> = 0.518	0.083	<i>P</i> = 0.150	<i>P</i> = 0.791	<i>P</i> = 0.308
Respondent more willing	4.1 (3.5–4.9)	10.0 (3.8–23.7)	2.7 (1.2–5.7)		1.74 (0.82–3.68) ^{‡‡}	1.11 (0.51–2.42) ^{‡‡}	0.58 (0.21–1.65) ^{‡‡}
Partner more willing	5.9 (5.2–6.7)	6.3 (3.0–12.6)	7.8 (3.3–17.6)				
Both willing	90.0 (89.0–91.0)	83.8 (71.8–91.3)	89.5 (80.2–94.8)				
Contraception used		<i>P</i> = 0.0002	<i>P</i> = 0.428	0.082	<i>P</i> = 0.007	<i>P</i> = 0.991	<i>P</i> = 0.038
Only withdrawal	6.2 (5.4–7.1)	0.6 (<0.1–4.2)	4.8 (2.1–10.5)		} }	} }	} }
Only rhythm method	0.8 (0.5–1.2)	0	0		2.33 (1.26–4.33) ^{§§}	1.00 (0.53–1.88) ^{§§}	0.36 (0.14–0.94) ^{§§}
Did not use but partner may have done	5.1 (4.4–5.9)	6.1 (3.0–12.0)	3.9 (1.1–12.6)		} }	} }	} }
Neither partner used any	23.1 (21.6–24.6)	47.2 (36.2–58.5)	28.1 (19.2–39.0)		} }	} }	} }
Only condom	41.4 (39.7–43.1)	38.2 (27.1–50.6)	49.2 (38.1–60.5)		} }	} }	} }
Only 'other' including pill	16.8 (15.6–18.0)	6.2 (2.2–16.7)	9.8 (4.7–19.4)		} }	} }	} }
Used condom and 'other'(including pill)	6.8 (6.0–7.8)	1.7 (0.5–5.6)	4.2 (1.6–10.8)		} }	} }	} }
(b) Women							
Denominator ^{‡,§}	6369	141	194	–	–	–	–
Status of partnership		<i>P</i> < 0.0001	<i>P</i> < 0.0001	0.004	<i>P</i> < 0.0001	<i>P</i> = 0.556	<i>P</i> = 0.018
Married	4.0 (3.4–4.5)	74.8 (63.1–83.8)	45.8 (36.3–55.6)		9.53 (3.11–29.2)**	1.25 (0.59–2.65)**	0.26 (0.09–0.79)**
Engaged	2.8 (2.4–3.3)	4.5 (1.8–10.7)	5.0 (2.6–9.5)				

(Continued)

Table 3 Continued

(b) Women	All women % (95% CI)	Pakistani % (95% CI)	Indian % (95% CI)	P value*	Adjusted OR [†] (95% CI) Pakistani versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus Pakistani (ref.)
Cohabiting but not married	0.6 (0.4–0.8)	0	0.3 (<0.1–2.0)				
Steady relationship	60.8 (59.4–62.2)	5.1 (2.9–8.7)	27.3 (19.4–37.0)				
Known for a while but not steady relationship	21.7 (20.6–22.9)	9.4 (3.8–21.4)	15.0 (7.9–26.8)				
Recently met	7.4 (6.7–8.2)	5.7 (1.8–17.0)	4.0 (1.8–8.7)				
Met for first time	2.0 (1.6–2.4)	0.5 (<0.1–3.6)	1.8 (0.7–4.7)				
Knew well/for long time	0.2 (0.1–0.4)	0	0				
Other	0.5 (0.4–0.8)	0	0.8 (0.1–5.2)				
Timing		<i>P</i> = 0.020	<i>P</i> = 0.0002	0.542	<i>P</i> = 0.234	<i>P</i> = 0.907	<i>P</i> = 0.249
Wish waited longer	35.7 (34.3–37.1)	20.9 (13.0–31.9)	21.7 (14.0–32.2)		2.29 (0.58–8.96) ^{††}	1.04 (0.56–1.94) ^{††}	0.53 (0.17–1.58) ^{††}
About the right time	61.6 (60.2–63.0)	74.8 (63.8–83.3)	69.8 (59.5–78.4)				
Should not have waited so long	2.7 (2.3–3.2)	4.3 (1.6–11.2)	8.5 (4.3–15.9)				
Willingness		<i>P</i> = 0.332	<i>P</i> = 0.434	0.175	<i>P</i> = 0.234	<i>P</i> = 0.907	<i>P</i> = 0.249
Respondent more willing	1.2 (0.9–1.6)	0.9 (0.2–3.7)	1.0 (0.3–3.6)		2.29 (0.58–8.96) ^{††}	1.04 (0.56–1.94) ^{††}	0.53 (0.17–1.58) ^{††}
Partner more willing	22.5 (21.3–23.7)	17.6 (11.5–25.9)	27.2 (18.7–37.6)				
Both willing	76.3 (75.0–77.5)	81.6 (73.1–87.9)	71.9 (61.4–80.4)				
Contraception used		<i>P</i> < 0.0001	<i>P</i> = 0.071	0.001	<i>P</i> = 0.006	<i>P</i> = 0.032	<i>P</i> = 0.651
Only withdrawal	5.2 (4.6–5.8)	2.2 (0.7–7.1)	5.0 (2.0–11.8)		}	}	}
Only rhythm method	0.7 (0.5–0.9)	1.2 (0.2–7.8)	2.0 (0.7–5.8)		3.16 (1.40–7.14) ^{§§}	1.90 (1.06–3.41) ^{§§}	0.83 (0.37–1.88) ^{§§}
Did not use but partner may have done	0.5 (0.4–0.7)	0.4 (<0.1–2.7)	1.1 (0.3–4.4)		}	}	}
Neither partner used any	21.9 (20.7–23.1)	54.5 (43.1–65.5)	27.7 (20.7–36.0)		}	}	}
Only condom	44.9 (43.3–46.4)	19.5 (11.9–30.1)	47.7 (37.8–57.8)		}	}	}
Only 'other' including pill	18.4 (17.3–19.5)	17.3 (9.9–28.7)	11.5 (6.8–18.7)		}	}	}
Used condom and 'other' (including pill)	8.5 (7.7–9.4)	4.9 (1.4–15.6)	4.8 (2.3–10.0)		}	}	}

CI = confidence interval; OR = odds ratio

P* value for difference between Pakistanis and Indians. *P* values in previous two columns refer to the difference between respondents in the specific ethnic groups and respondents of other ethnicities[†]OR of reporting outcome adjusted for the sociodemographic variables in Table 1 and age at first intercourse[‡]Unweighted denominators, weighted percentages and adjusted odds ratios[§]Denominator is respondents who reported having had sex aged 13+ years^{}Adjusted OR of reporting being married at first sex versus not married^{††}Adjusted OR of reporting 'wish waited longer' versus reporting 'about the right time' or 'should not have waited so long'^{†††}Adjusted OR of respondent more willing or partner more willing versus equally willing^{§§}Adjusted OR of not using reliable contraception (withdrawal, rhythm method, respondent not using but partner may have done, neither partner using) or versus using (reliable) contraception (condom and/or 'other' including the pill)

DISCUSSION

This paper presents data from Britain's most recent national probability sex survey to describe attitudes towards sex, experiences of learning about sex and first heterosexual intercourse, among people of Indian and Pakistani origin resident in Britain. Over

half of the respondents of Pakistani origin reported that they considered religion as 'very important' to them and were more likely than other respondents to report premarital sexual activity and abortion as wrong, even after adjusting for sociodemographic differences. This finding is consistent with qualitative results,^{10,20}

Table 4 Learning about sex: a comparison of Pakistanis, Indians and the general population: (a) men and (b) women

	All men % (95% CI)	Pakistani % (95% CI)	Indian % (95% CI)	<i>P</i> -value*	Adjusted OR [†] (95% CI) Pakistani versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus Pakistani (ref.)
(a) Men							
Denominator ^{‡,§}	5168	177	171	–	–	–	–
Main source of sex education		<i>P</i> = 0.0001	<i>P</i> = 0.005	0.030	<i>P</i> = 0.956	<i>P</i> = 0.125	<i>P</i> = 0.209
Lessons at school	22.4 (21.1–23.8)	27.2 (17.9–39.1)	31.7 (22.2–43.0)		0.98 (0.49–1.95)**	1.58 (0.88–2.83)**	1.71 (0.74–3.96)**
Doctor/nurse/clinic	<0.1 (<0.1–0.2)	0.1 (<0.1–1.0)	0				
Parent	6.4 (5.6–7.2)	1.0 (0.2–4.0)	0.4 (<0.1–1.6)				
Sibling	3.4 (2.8–4.0)	0.8 (0.2–3.2)	1.0 (0.3–2.9)				
Peers	36.3 (34.7–37.8)	40.0 (29.7–51.0)	37.2 (27.5–48.1)				
First sexual partner	15.6 (14.5–16.7)	7.1 (3.6–13.8)	9.6 (5.0–17.7)				
Media	12.2 (11.2–13.3)	12.0 (7.2–19.3)	18.3 (11.9–27.0)				
Other	3.8 (3.2–4.4)	11.9 (6.1–21.9)	1.9 (0.8–4.7)				
Communication with parents about sex in adolescence		<i>P</i> = 0.009	<i>P</i> = 0.004	0.040	<i>P</i> < 0.0001	<i>P</i> = 0.433	<i>P</i> = 0.004
Did not discuss	74.6 (73.0–76.1)	91.1 (81.6–96.0)	77.0 (67.3–84.6)		6.41 (3.15–13.0) ^{††}	1.27 (0.70–2.28) ^{††}	0.22 (0.08–0.61) ^{††}
Easy with one/both	15.8 (14.6–17.1)	1.3 (0.3–5.2)	6.5 (2.6–15.6)				
Difficult	8.2 (7.3–9.3)	7.6 (3.1–17.4)	16.2 (10.2–24.6)				
Varied/depended on topic	1.4 (1.1–1.8)	0	0.3 (<0.1–2.1)				
Adequate information at first sex, grouped^{††}		<i>P</i> = 0.097	<i>P</i> = 0.828	0.319	<i>P</i> = 0.105	<i>P</i> = 0.573	<i>P</i> = 0.705
Needed more information	78.7 (77.1–80.3)	69.7 (57.0–80.0)	77.6 (66.6–85.8)		0.59 (0.31–1.12)	0.83 (0.44–1.58)	1.18 (0.49–2.85)
(b) Women							
Denominator ^{‡,§}	6942	188	222	–	–	–	–
Main source of sex education		<i>P</i> < 0.0001	<i>P</i> = 0.003	0.2835	<i>P</i> = 0.005	<i>P</i> = 0.026	<i>P</i> = 0.729
Lessons at school	26.0 (24.7–27.2)	46.9 (37.1–56.9)	34.4 (26.4–43.5)		2.23 (1.27–3.90)**	1.77 (1.07–2.93)**	0.87 (0.39–1.95)**
Doctor/nurse/clinic	0.4 (0.2–0.6)	1.1 (0.3–3.4)	1.6 (0.3–7.4)				
Parent	17.5 (16.5–18.6)	2.8 (1.2–6.3)	4.7 (1.8–11.3)				
Sibling	4.8 (4.3–5.5)	5.4 (2.2–12.5)	6.9 (3.0–14.8)				
Peers	29.2 (27.9–30.6)	16.1 (10.6–23.5)	25.7 (18.1–35.1)				
First sexual partner	7.1 (6.5–7.8)	6.4 (3.6–11.3)	7.9 (4.7–13.0)				
Media	11.1 (10.3–12.0)	12.9 (7.3–21.8)	14.7 (9.8–21.6)				
Other	3.8 (3.4–4.4)	8.6 (4.0–17.4)	4.1 (2.3–7.2)				
Communication with parents about sex in adolescence		<i>P</i> = 0.0001	<i>P</i> = 0.0001	0.167	<i>P</i> = 0.052	<i>P</i> < 0.0001	<i>P</i> = 0.455
Did not discuss	57.1 (55.6–58.6)	78.8 (69.8–85.6)	70.8 (61.2–78.9)		2.04 (0.99–4.17) ^{††}	2.62 (1.57–4.37) ^{††}	1.37 (0.60–3.13) ^{††}

(Continued)

Table 4 Continued

(b) Women	All women % (95% CI)	Pakistani % (95% CI)	Indian % (95% CI)	P-value*	Adjusted OR [†] (95% CI) Pakistani versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus other ethnicities (ref.)	Adjusted OR [†] (95% CI) Indian versus Pakistani (ref.)
Easy with one/both	27.0 (25.7–28.3)	9.4 (4.5–18.5)	9.0 (5.0–15.9)				
Difficult	13.8 (12.8–14.9)	9.9 (5.7–16.7)	19.5 (12.3–29.3)				
Varied/depended on topic	2.2 (1.8–2.6)	2.0 (0.7–5.6)	0.7 (0.2–2.1)				
Adequate information at first sex, grouped^{††}		<i>P</i> = 0.002	<i>P</i> = 0.835	0.016	<i>P</i> = 0.593	<i>P</i> = 0.455	<i>P</i> = 0.323
Needed more information	78.5 (77.2–79.7)	62.8 (50.5–73.7)	79.2 (71.4–85.3)		0.83 (0.41–1.66)	1.24 (0.71–2.15)	1.56 (0.64–3.77)

CI = confidence interval; OR = odds ratio

**P*-value for difference between Pakistanis and Indians. As in other tables, *P*-values in other columns refer to the difference between respondents in the specific ethnic groups and all other respondents

[†]OR of reporting outcome adjusted for the sociodemographic variables shown in Table 1 and age at first intercourse

^{††}Unweighted denominators, weighted percentages and adjusted ORs

^SDenominator is all respondents aged 16–44 years, unless stated – see footnote^{††}

**Adjusted OR of reporting lessons at school as main source of sex education versus all other sources

^{††}Adjusted OR of reporting 'did not discuss' versus easy/difficult/depended on topic

^{†††}Denominator is respondents who reported having had sex aged 13+ years

and may reflect how premarital sex and abortion are disapproved of and/or forbidden in Islam, the predominant religion reported by the Pakistanis sampled. While a smaller proportion of Indians than Pakistanis described religion as 'very important', this was still a significantly larger proportion than observed among respondents of ethnicities other than Indian. These findings may therefore help explain the later age at sexual intercourse previously reported for Pakistanis and Indians.¹² Nevertheless, approximately two-thirds of Pakistani and Indian men reported being in non-marital relationships at first sexual intercourse, suggesting that attitudes are not necessarily consonant with behaviour, which has also been observed in qualitative studies.^{21,22}

In terms of contraceptive use at first sex, this study found that Indian respondents reported similar levels of use to that of others in the general population. In contrast, over half of Pakistanis reported that neither they nor their partner used contraception at first sex. However, it is important to note that a large percentage of Pakistani women reported being married at first sex so contraception may not have been relevant if they wished to become pregnant. It is necessary though to consider whether birth control at first sex is perhaps not readily accessible or negotiable with a partner as family planning intentions may be influenced by cultural and familial expectations of fertility (i.e. motherhood soon after marriage) rather than their own preferences.^{13,23} It was not possible to examine these hypotheses in this study as questions on reasons for non-use of contraception at first intercourse were not asked in Natsal-2.

Non-use of contraception may also be due to a lack of awareness or poor knowledge. This study found that three-quarters of all respondents reported wanting more information about sex around the time they first had intercourse. While Pakistani women were found to be significantly *less* likely to report this, the majority of these women still reported having wanted more information. This is consistent with others' reports of a desire for

more sexual health information among these ethnic groups,^{9,10} despite cultural taboos surrounding sex and sexual matters.

These data have implications not only for the UK's sex and relationship education (SRE) curriculum in general, as discussed previously,²⁴ but also when planning and delivering SRE specifically for Pakistanis and Indians, especially women, for whom lessons at school were more likely to be reported as their main source of sex education relative to their male counterparts and women of other ethnic groups. This is also important because Indians and Pakistanis were less likely than respondents of other ethnicities to report that they had found it easy to talk to their parents about sexual matters during their adolescence.

It is important to acknowledge that, for some respondents, learning about sex and their first sexual intercourse may have occurred some time before their interview for Natsal-2, which is a limitation of cross-sectional retrospective survey data. Additionally, the Natsal-2 data-set is some nine years old, and while development work for Natsal-3 is currently underway, the new survey, with a proposed similar sample size, will not oversample ethnic minorities. Natsal-2 therefore remains the most reliable source of sexual behavioural and attitudinal data available for Pakistanis and Indians in Britain. Another strength of Natsal-2 is that it enabled us to consider the data for these two ethnic groups separately rather than under the generic heading of 'South Asian', which would have meant that a number of differences would not have been detected. Even so, we acknowledge that our approach is still relatively crude and that it is likely to have masked the heterogeneity of behaviours, cultures and beliefs found within these ethnic groups. This is a limitation of quantitative analyses, but the insights that have been gained from our study will complement the findings of qualitative studies to better understand the interplay between attitudes, culture, faith and sexual behaviour. Doing so will help us to plan and deliver culturally appropriate education, health promotion and sexual health-care services.

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