

# Sexual attitudes and practices of selected groups in Northern Ireland since the emergence of AIDS

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## SUMMARY

*One hundred and seventeen heterosexual males and females attending a sexually transmitted disease clinic and 57 homosexual males from a local "gay" club were asked to complete a questionnaire regarding their attitudes and sexual practices since the emergence of AIDS. The results show a trend towards increasing partner change rate among heterosexual males. There has been an increase in the practice of insertive anal intercourse by homosexual men with Northern Ireland contacts but no corresponding increase with contacts outside Northern Ireland. The practice of receptive anal intercourse has remained constant. Significant differences in attitudes between homosexual and heterosexual males were expressed with regard to testing of 'at risk groups' ( $p < 0.001$ ), in the uptake of testing ( $p < 0.01$ ), and in attitudes to sexual practices if they themselves became HIV positive. There was a low level of anxiety amongst heterosexuals regarding risk of HIV infection in the future. Less than 50% of the heterosexual patients attending this clinic use condoms, though more claim to intend to use them in future.*

## INTRODUCTION

Since the recognised cases of human immunodeficiency virus (HIV) infection in the United Kingdom the disease has largely remained within well defined groups. These groups include homosexual males, injecting drug users and haemophiliacs.<sup>1</sup> Reported transmission of the infection heterosexually has been uncommon<sup>2</sup> but is increasing.<sup>3</sup> Events which may eventually enhance a changing pattern of transmission are (a) Introduction of infection by heterosexual contact with persons from outside the UK, (Africa, USA or South America). (b) 'Bridging' of the homosexual/heterosexual groups by sexual intercourse between an infected bisexual male and a female partner. (c) Sexual intercourse between an infected injecting drug user and a heterosexual partner. There is of course an overlap between drug abuse and prostitution in both sexes and the risk to both homosexual and heterosexual communities is obvious. It is probable that women are at greater risk of infection in the heterosexual community.

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Despite public education campaigns about HIV in the USA and the UK it appears that heterosexuals may not yet perceive themselves as actually being at risk despite a definite increase in knowledge about risk factors.<sup>4, 5</sup> On the other hand homosexual men in cosmopolitan areas seem to have recognised the risk of infection and are adjusting their sexual practices accordingly.<sup>6, 7, 8</sup> In Northern Ireland there is not known to be a significant injecting drug-using population, nor is there a large, open, homosexual community. People here may thus derive a false sense of security since few people know anyone whom they perceive to be at risk or a likely source of infection.

## **METHODS**

A questionnaire to be completed by the interviewer was devised to determine age, sexual orientation, age of first sexual intercourse, sexual practices, partner change-rates, and condom usage for the years 1981, 1984 and 1987 among heterosexual males and females and homosexual men. Participants were also questioned as to sexual contact outside Northern Ireland during the period of the study. Their perception of their past, present and future risk of HIV infection and what measures they had used in the past or were considering using to avoid infection in the future were ascertained. Participants' attitudes towards HIV testing for particular groups, whether they themselves had had an HIV test and their feelings on having such a test done were also examined, as was their attitude to having sex with someone who was HIV positive. They were also asked questions regarding concern over HIV infection. The questionnaire was presented in March 1988 to groups of people thought to be at risk of acquiring HIV infection in this community;<sup>1</sup> these were heterosexual male and female attenders at the Genitourinary Medicine Clinic, Royal Victoria Hospital, Belfast recruited on a sequential basis, and homosexual/bisexual men attending a local "gay" club.

The numbers making a particular response are expressed as a percentage of their subgroup. In the case of retrospective answers of sexual activity in 1987, 1984 and 1981 percentages given are for those who were sexually active at the time.

Analysis where appropriate used Chi-squared testing between the groups of the observed responses. This was not appropriate for questions relating to sexual activity over the preceding six years.

## **RESULTS**

One hundred and seventy-four questionnaires were completed, 58 by heterosexual males, 59 by females and 57 by homosexual men. The information collected regarding mean age, mean age at first intercourse, median numbers of sexual partners for 1987, 1984 and 1981, together with the ranges are shown for each group in Table I. Median as opposed to mean numbers of partners were used because of the skewing effect on the mean of a few with high rates of partner change in each group.

Sexual practices in Northern Ireland suggest that oral sex was most common among homosexual men but is becoming more commonly practised by heterosexual males — 70.4% in 1987 compared to 57.6% in 1981. Vaginal intercourse was usually a component of heterosexual contact but 12.3% of the homosexual/bisexual group had had vaginal intercourse during 1987.

Among homosexual men insertive anal intercourse had become more commonly practised — 72.7% in 1987 compared to 44.7% in 1981 while receptive anal

TABLE I

*Patients attending the genitourinary medicine clinic at the Royal Victoria Hospital and homosexual men attending a "gay" club*

	<i>Heterosexual patients</i>		<i>Homosexual</i>
	<i>Male</i>	<i>Female</i>	<i>males</i>
Number	58	59	57
Mean age	28.6	24.0	28.1
Range	(20-62)	(16-45)	(19-55)
Caucasian	100%	100%	100%
Past HIV testing	12.1%	23.7%	41.1%

*Median number of sexual partners in Northern Ireland per year*

	<i>Heterosexual patients</i>		<i>Homosexual</i>
	<i>Male</i>	<i>Female</i>	<i>males</i>
1987	2.0 (Range 0-10)	1.4 (Range 1-9)	3.4 (Range 1-60)
1984	1.9 (Range 0-25)	1.1 (Range 0-10)	3.5 (Range 1-150)
1981	1.3 (Range 1-25)	1.1 (Range 0-10)	3.1 (Range 0-100)

*Number of sexually active persons having sexual encounters outside Northern Ireland by year*

	<i>Heterosexual patients</i>		<i>Homosexual</i>
	<i>Male</i>	<i>Female</i>	<i>males</i>
1987	15/58 (25.8%)	12/59 (20.3%)	42/57 (73.7%)
1984	15/51 (29.4%)	6/38 (15.8%)	36/49 (73.5%)
1981	10/39 (25.6%)	4/21 (19.0%)	32/38 (84.2%)

intercourse had been practised by a constant proportion of homosexual men, 31.6% in 1981, 37.8% in 1984 and 38.9% in 1987. Among heterosexuals anal intercourse would appear to be practised by a relatively constant percentage, 9.4% of males and 9.5% of females in 1981 and 9.3% of males and 8.8% of females in 1987. Orò-anal sexual stimulation was not admitted to by heterosexuals while the figures for homosexual men were 34.2% in 1981, 29.5% in 1984 and 40% in 1987.

Sexual encounters outside Northern Ireland had been commoner by homosexual men, 75.4% admitting a sexual encounter compared to 25.9% of heterosexual males and 20.3% of females in 1987. A similar pattern was seen in 1984 and 1981. The most common sexual practice outside Northern Ireland among homosexual men was oral sex, 41.9% in 1987, while insertive and receptive anal intercourse were much less common than with Northern Ireland contacts, 21.4%

and 11.9% respectively for 1987. This compared to 25.0% and 9.7% respectively for 1981. Condoms had been used by 49% of heterosexual males, 39% of females and 57% of gay males.

Eight heterosexual males, 14 females and 22 homosexual males had had an HIV test. This was a significant difference between the uptake of HIV testing in the heterosexual males and homosexual males ( $p < 0.01$ ). Present or future anxiety about acquiring HIV and personal perception of past and present risk of acquisition of HIV because of lifestyle are summarised in Table II.

TABLE II  
*Anxiety about acquisition of HIV infection and perception of personal risk*

	<i>Heterosexual patients</i>		<i>Homosexual</i>
	<i>Male</i>	<i>Female</i>	<i>males</i>
<i>Anxiety about HIV now</i>			
Not anxious	36 (62.1%)	35 (59.3%)	19 (33.9%)
Slightly anxious	14 (24.1%)	19 (32.2%)	30 (53.6%)
Quite anxious	2 ( 3.4%)	1 ( 1.7%)	6 (10.7%)
Very anxious	6 (10.3%)	4 ( 6.8%)	1 ( 1.8%)
<i>Anxiety about HIV in future</i>			
Not anxious	23 (39.7%)	27 (45.8%)	10 (17.9%)
Slightly anxious	20 (34.5%)	22 (37.3%)	19 (33.9%)
Quite anxious	5 ( 8.6%)	3 ( 5.1%)	11 (19.6%)
Very anxious	10 (17.2%)	7 (11.9%)	16 (28.6%)
<i>Risk of past lifestyle</i>			
No risk	27 (46.6%)	32 (55.2%)	22 (39.2%)
Little risk	16 (27.6%)	13 (20.7%)	19 (33.9%)
Great risk	2 ( 3.4%)	3 ( 5.2%)	3 ( 5.4%)
<i>Risk of present lifestyle</i>			
No risk	53 (91.5%)	58 (98.3%)	39 (69.4%)
Little risk	5 ( 8.6%)	1 ( 1.7%)	12 (21.4%)
Moderate risk	—	—	4 ( 7.1%)
Great risk	—	—	1 ( 1.8%)

The responses to questions regarding changes of lifestyle in the years 1981, 1984 and 1987 are shown in Table III along with the measures the people intended to take in the future. By 1987, 59.3% of homosexual men had made some alteration to their lifestyle, while only 31% of heterosexual males and 16.9% of females had done so. Risk reduction by change of practices was most common among homosexual men while heterosexuals intend to use condoms and decrease their number of partners. Fifty per cent of homosexual men compared to 87.9% of heterosexual men felt that 'at risk' groups should be compulsorily HIV tested. This is highly significant ( $p < 0.001$ ).

TABLE III  
*Deliberate changes made in lifestyle to avoid HIV infection*

	Heterosexual patients		Homosexual
	Male	Female	males
Made deliberate change in			
1987	17/55 (31%)	9/54 (16.6%)	32/54 (59.3%)
1984	1/49 ( 2%)	2/32 ( 6.2%)	6/46 (13.0%)
1981	0/39 ( 0%)	0/21 ( 0%)	2/28 ( 7.1%)
Reduce risk in future by adjusting sex life:			
Change practices	37 (63.8%)	34 (57.6%)	45 (80.4%)
Use condom	8 (21.6%)	5 (14.7%)	29 (64.4%)
Decrease partners	31 (83.7%)	30 (88.2%)	33 (73.3%)
Avoid partner from dangerous areas	29 (81.0%)	32 (94.1%)	31 (68.8%)
	25 (67.6%)	26 (76.5%)	25 (55.5%)

The responses to a hypothetical situation 'what sexual contact would you be prepared to have with a loved one who was found to be HIV +ve' were that 53.6% of homosexual men would continue masturbation and 26.8% passive oral sex, and that 12.5% and 10.7% would continue to have insertive and receptive anal intercourse respectively. Among heterosexuals, 19% of males and 10% of females would continue masturbation and 10.3% of both vaginal intercourse (Table IV).

TABLE IV  
*Response to hypothetical situations*

	Heterosexual male (N = 58)	Homosexual male (N = 56)
"What sexual contact would you have if a partner you loved was found to be HIV positive?"		
Masturbation	11 (19.0%)	29 (51.7%)
Vaginal intercourse	6 (10.3%)	—
Insertive anal intercourse	—	7 (12.5%)
Receptive anal intercourse	—	6 (10.7%)
"What would your actions be if you were found to be HIV positive?"		
Inform partner	55 (94.8%)	40 (71.4%)
Casual protected intercourse	3 ( 5.2%)	20 (35.7%)
Find another HIV positive partner	3 ( 5.2%)	16 (28.6%)
Stop all sex	48 (82.8%)*	14 (25.0%)*

\* $p < 0.001$

If the respondents themselves became HIV +ve then 94·8% of heterosexual males claimed they would inform their partners compared to 71·4% of homosexual men, 35·7% of homosexual men would continue casual protected sexual intercourse and 28·6% would find another HIV positive partner. Only 5·2% of heterosexual males would undertake either of these options. 82·8% of heterosexual males and 25% of homosexual males claimed they would stop all sexual intercourse ( $p < 0\cdot001$ ).

## DISCUSSION

It is recognised that a study such as this, depending on recall of behaviour up to seven years previously, may not be reliable although memory of sexual behaviour may be more clearly recalled than other aspects of human behaviour. Allowing for the foregoing, the figures for median numbers of partners in a given year show that the homosexual males had more partners per year than the heterosexual male patients. Homosexual partner change rate has remained constant comparing 1981 to 1987, while over the same period heterosexual males have shown a trend towards an increase of partner change rate. Papers from two studies carried out in London over the same period have shown a decrease in partner change rate.<sup>9, 10</sup>

The sexual practice of insertive anal intercourse has become more commonly practised by homosexual men, while the number practising receptive anal intercourse has remained fairly constant. Over the years 9% of the heterosexual male and female patients had practised anal intercourse. Ano-receptive intercourse has been shown to be an important risk factor in the acquisition of HIV infection both in homosexual men and in females.<sup>7, 10</sup> This form of heterosexual transmission has not been highlighted in Government campaigns and hence females practising ano-receptive intercourse may be unaware of the increased risk associated with this.

The small numbers of heterosexual patients answering questions on sexual practices while outside Northern Ireland make comparisons between the groups impossible. Amongst homosexual males the percentage practising receptive and insertive anal intercourse while abroad remained constant. Although used less frequently with Northern Ireland contacts these practices pose an obvious threat of 'importing' infection. These trends in sexual practices tend to confirm the 'splendid isolation' hypothesis which may arise in a community such as Northern Ireland where reported seroprevalence of HIV is low.

There was a significant difference ( $p < 0\cdot001$ ) between the number of homosexual men and heterosexual male patients who felt 'at risk' groups should be HIV tested. This finding could be interpreted as being due to heterosexual prejudice against homosexuals or that heterosexuals do not yet see themselves as an 'at risk' group, also that homosexuals are more aware of the implication of HIV testing to the individual. It has been shown that attitudes to AIDS amongst a group of London medical students correlate more closely to attitudes to homosexuality than to knowledge about the disease<sup>11</sup> while among a group of Northern Ireland students, 51·6% believed AIDS 'sufferers' should be cared for in a special hospice,<sup>5</sup> whether out of compassion or from a wish to isolate the disease. These studies strongly suggest that the heterosexuals do not see themselves as at risk, and are prejudiced against homosexuals.

Amongst heterosexuals there is a low level of anxiety about HIV infection now or in the foreseeable future and there has been significantly less uptake of HIV

testing by heterosexual males than homosexual men. More importantly there was little perceived risk amongst the same group, 91·4% of heterosexual males and 98% of heterosexual females felt that their present lifestyle did not put them at risk despite the fact that all these people were attending a genitourinary medicine clinic at the time of participating in the questionnaire.

Table II shows the number expressing a particular level of anxiety, as a percentage of their gender/orientation group. Cross tabulation of HIV testing to anxiety showed tested males, regardless of orientation, to be more anxious about the future than untested males. These results suggest that a request for HIV testing may stem from personality traits rather than definite knowledge of previous "at risk" behaviour. Knowledge of test results has been shown to affect the behaviour of homosexual men, but is not recommended as an aid to risk reduction.<sup>12</sup>

The highest proportion of people prepared to reduce risk of HIV infection by adjusting their sex life was among homosexual males (80·4%); 72% of these men included condom use as part of that adjustment. Heterosexual females were least prepared to adjust their sex life (57·6%), the most popular alteration being to decrease the number of partners.

Condom usage has been one of the main methods of protection advocated in recent education campaigns. Only 49% of heterosexual male patients, 39% of heterosexual female patients and 57% of the homosexual males admitted to having ever used condoms. (Unfortunately no questions were asked regarding how regularly condoms were used). About half of each group intended to use condoms as part of their risk reduction adjustments. In a group of 399 sexually active Northern Irish students, 39·1% used condoms<sup>5</sup> and in an American study over one year, it was reported that "sexually active adolescents report placing high value and importance on using a contraceptive that protects against sexually transmitted diseases and know that condoms prevent these diseases. Despite this the females continued not to intend to have their partners use condoms and the males' intentions to use condoms decreased".<sup>13</sup> It would appear that further education regarding the benefits of consistent condom use is required.

Finally, responses to questions regarding sexual activity with a hypothetical known HIV +ve partner show that homosexuals are more willing to consider sexual contact with such a partner. Questions regarding what action people would take if they themselves became infected with HIV showed that homosexuals would be more willing to continue protected intercourse than heterosexual men. Significantly more male heterosexuals claimed they would stop all sexual intercourse compared to homosexual males. These findings would support the hypothesis that homosexual males, who see themselves more at risk of HIV infection, have considered their position more fully with a resultant pragmatic response to the issues of sex and HIV infection, compared to their heterosexual male counterparts, who respond more idealistically probably because they themselves feel they will never have to face these issues as fact.

It appears from this study that the heterosexual patients attending a genitourinary medicine clinic may not yet have grasped the fact that they are at risk of HIV infection and further education is required. It also appears that while a group of homosexual men had considered the issues and dangers more fully and have begun to change their attitudes and practices accordingly, they are still not completely convinced of their own risk. Although the populations studied were highly selected groups by their site of recruitment, the implications are that young

people in Northern Ireland have not taken note of national education campaigns and a further locally based education initiation may be indicated.

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