HIV AND AIDS

Aids: knowledge, attitudes and reported sexual behaviour among students in West Glamorgan

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A SURVEY was carried out among a representative sample of college students in West Glamorgan district in 1989, to assess their level of knowledge of human immunodeficiency virus infection, their attitudes, and their reported sexual behaviour. The levels of knowledge of modes of infection and its course were good, although a few areas of confusion over transmission routes were expressed – such as donating blood and mosquito bites. Most of the students were aware of preventive measures but a significant minority believed *coitus interruptus* and spermicidal cream could also prevent HIV infection. Many did not express sympathy for people with Aids. An overwhelming majority expressed a need for sex education in secondary schools.

FOLLOWING the Government's public information campaign in 1986[1] and subsequent local health education campaigns, an initial survey was conducted in 1988 in the secondary schools in West Glamorgan, to assess the knowledge, attitudes and beliefs about Aids among the 14-15 year-old pupils[2]. The results revealed high levels of knowledge, but there was considerable prejudice against people with HIV and Aids and the majority expressed a fear of Aids.

In 1989, the study reported here was carried out among 18-20 year-old students from the university, Institute of Higher Education and tertiary colleges in West Glamorgan to measure knowledge, attitudes and reported sexual behaviour related to HIV and Aids.

The sub-group of college students aged 18-20 was the focus of attention because, as young adults, they are believed to be sexually active and potentially the most vulnerable to HIV and Aids. This population is also a recognised high risk group for sexually transmitted diseases[3], and the student campus could be a place into which HIV is introduced by many routes including international travel, a feature of many students' lives.[4]

Methods

Students between the ages 18 and 20 were chosen as the study population; all the tertiary colleges, plus the university in the county of West Glamorgan were included in the study. The study sample was obtained through cluster sampling and by this process, from our study population of all the 18 to 20 year-old students, small sub-divisions of individual classes (clusters) were randomly chosen to make up the study sample. The survey was carried out during the summer term, 1989.

With prior permission from the lecturer concerned, anonymous questionnaires were distributed to students in their lecture rooms. The questionnaire had a set of questions evaluating the participant's knowledge of HIV and Aids, with a three-point response format: 'true', 'false' and 'don't know', or 'high risk', 'low risk' and 'no risk'. Statements designed to assess the beliefs and attitudes relating to a number of aspects of Aids had a five-point scale: 1 = strongly agree; 5 = strongly disagree. There were also questions on sexual behaviour.

The participants were asked to work independently, in the presence of the investigator, and a total of 802 questionnaires were distributed, completed and returned. Of these, 10 questionnaires were removed from the sample as four were incomplete; three were outside the age boundary and three were blank. The remaining 792 were usable and represent the sample upon which all analysis was based. The main analysis was done with SPSS software.

Of the sample of 792, 48 per cent were men and 52 per cent were women, closely matching the sex profile of the student population as a whole (47 per cent men and 53 per cent women). The age breakdown showed about 42 per cent were 18 years old; 35 per cent were 19 years old and another 24 per cent were 20 years old.

Results

Knowledge

Table 1 shows the percentage of the sample believing that certain activities carry a high risk of HIV transmission. Knowledge about some routes of transmission was generally very high: 99 per cent and 97 per cent, respectively, know that sharing needles in intravenous drug misuse and multiple sexual partners are high risk activities. However, there was confusion over other routes. For example, 67 per cent indicated blood transfusion, 17 per cent blood donation, and 11

Table 1
Knowledge of high risk activities for HIV transmission (percentage of sample selecting item)

	High risk	Low risk	No risk
Kissing	1%	21%	77%
Sharing cups, mugs and glasses	1	12%	87%
Sharing razors	47%	45%	8%
Sharing toothbrush	11%	47%	41%
Using public toilets	3%	23%	75%
Blood transfusion (Receiving blood)	67	27%	5%
Sharing needles in intravenous drug misuse	99%	1%	0%
Donating blood	17%	27%	54%
Mouth to mouth resuscitation (kiss of life)	4%	39%	57%
Multiple sexual partners	97%	3	0
Sharing a room with a person with Aids	3	27	70%
Mosquito and other such insect bites	11%	43%	44%
Cannabis smoking	3%	12%	84%

Table 2
Knowledge of preventive measures for Aids (percentage of sample)

	Yes	No	Don't know
Use of condom during sexual intercourse	98%	1	1
Use of spermicidal cream during sexual intercourse	14%	70%	15%
Avoiding sex with prostitutes	92%	6%	2%
Coitus interruptus (withdrawing before ejaculation)	12%	79%	8%
One regular sexual partner	91%	[illegible]	1
Vaccination against Aids	10%	77%	12%
Eating low fat, high fibre diet	0%	94%	5%
(Female) sexual partner taking the pill	2%	95%	2%

Table 3
Reported sexual behaviour

Number of sexual partners	Men	Women
None	161	181
One	141	192
Two	38	22
Three	12	8
Four	7	4
Five	3	0
Six	2	0
Seven	1	0
Eight	4	0

per cent mosquito bites as carrying a high risk.

Knowledge about the course of HIV was high, with 94 per cent knowing that an infected person could pass on the virus to others without looking or feeling ill; 89 per cent knew that an infected person may not show any sign of infection for quite some time; and 84 per cent knew that such a person is generally prone to infection.

On the subject of prevention, **Table 2** shows that nearly all the students indicated that using a condom during sexual intercourse, avoiding sex with prostitutes and having one regular sexual partner, were measures likely to prevent Aids. However, 12 per cent indicated *coitus interruptus* and 14 per cent the use of spermicidal cream as preventive measures. Ten per cent thought that a vaccine against HIV existed, and a further 12 per cent were unsure about the situation.

Attitudes and beliefs

Sixty-six per cent believed that all people with Aids should be cared for in a special Aids hospice and 23 per cent believed they should be cared for at home by the family. One in five agreed with the statement: "Most of the people with Aids brought it upon themselves and they have only themselves to blame".

On the subject of control measures, one in three believed the spread of Aids could be controlled if people with Aids and HIV infection were quarantined; 53 per cent believed in compulsory blood testing for all tourists and immigrants; and 64 per cent felt all pregnant women should undergo a blood test for HIV.

To prevent the spread of Aids, 81 per cent felt free condoms should be made available in public places such as discos and cinemas; and 96 per cent indicated that all secondary schools should have sex education, with special emphasis on preventing the spread of Aids.

When asked: "How afraid are you of catching Aids?", 55 per cent admitted being a little afraid and 16 per cent admitted to being greatly afraid. When asked the reasons for their fear, various risk factors were indicated, but 56 per cent said they were afraid because they believed anyone could get Aids through bad luck or ill fate.

There were differences in attitude between men and women. In general, women were more sympathetic towards people with Aids; only 17 per cent of the women said people with Aids brought it upon themselves compared with 24 per cent of men. Forty-two per cent of men believed Aids could be controlled if all the people with Aids and HIV were quarantined but only 27 per cent of women were of this opinion. Sixty per cent of men believed testing all the country's tourists, immigrants and visitors for Aids is one way of controlling the spread of infection, while only 47 per cent of women shared this view.

The most popular source of information on Aids and HIV was television news and documentaries, indicated by 92 per cent. Sixty-nine per cent indicated magazines and newspapers; and 66 per cent government information leaflets and films.

Reported sexual behaviour

Respondents were asked if they had had sexual

intercourse in the last six months, and if so, the number of partners they had had in that period. **Table 3** shows that just over half said they had had sexual intercourse during the last six months, and just under half of the sample said they had not. Of the ones who had had sex, 141 men (68 per cent) and 192 women (85 per cent) reported only one sexual partner. The rest reported two or more partners as indicated in **Table 3**.

Half of those who had had sex reported that they did not use a condom.

Discussion

The survey results show that a vast majority of the 18 to 20 year-old college students in West Glamorgan knew the main ways in which HIV is transmitted and how the risk of infection could be reduced. High levels of knowledge about Aids among young adults has been reported by many previous surveys[5-9]. However, this study revealed confusion about blood transfusion, blood donation and insect bites and the risk of HIV transmission. Similar findings were reported in Doncaster[9].

An overwhelming majority knew that using a condom during sexual intercourse was a preventive measure. The point of concern, however, was that 12 per cent indicated *coitus interruptus* as a preventive method and 14 per cent had indicated that spermicidal creams during sexual intercourse were protective.

These figures are much higher than the ones reported in Northern Ireland, where only 7.5 per cent thought spermicidal creams, and 6 per cent thought *coitus interruptus*, would afford protection against HIV[6]. This shows there is confusion over many methods of contraception as effective ways of HIV prevention.

The fact that ten per cent thought a vaccine against HIV existed is also of concern.

There is very little information available on the sexual behaviour of young adults, but past surveys have indicated that one in five would have had two or more partners in the previous year[5-9]. Our results showed that 13 per cent reported two or more partners in the previous six months. Although not directly comparable, the results appear to be in the same order of magnitude as in previous surveys. Our survey reveals on the one hand a sizeable minority with multiple sexual partners, but, on the other hand, nearly half the sample with no sexual partners in the previous six months. It also revealed that about half of those who were sexually active reported using a condom while half did not. This applied to those with many sexual partners as well.

As the results showed that the vast majority of the sample were aware of the high risk of Aids from having many sexual partners, and of the value of condom use as a preventive measure, the findings on sexual behaviour indicate that knowledge and behaviour do not always correspond. This is not an uncommon finding in social psychology.

The implications for health education are that:

- there are still many misconceptions about the transmission of HIV and about preventive measures, and these need to be addressed;
- there is still considerable fear and prejudice to deal with;
- there is widespread support in this sample for greater access to sex education, including Aids education in schools, and for the free availability of condoms in public places;
- the fatalistic attitude that anyone can get Aids through ill fate or bad luck may be an impediment to more responsible behaviour and safer sexual practices;
- the mass media are important sources of information on HIV and Aids for this section of the population, and responsible education through these channels should be encouraged and supported with expert advice.

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