

## ORIGINAL ARTICLE

## Use of a leaflet to replace verbal pretest discussion for HIV: effects and acceptability

K E Rogstad, L Bramham, R Lowbury, G R Kinghorn

*Sex Transm Infect* 2003;**79**:243–245

**Objective:** To determine the effect of using a leaflet to replace formal verbal pretest discussion and assess its acceptability to patients.

**Setting and methods:** A leaflet was developed which gave information on all routine tests undertaken at a genitourinary medicine clinic. Information normally given during verbal pretest discussion for HIV was included. The leaflet was given to all new attenders at routine STI clinics. The proportion of patients accepting tests in the 6 weeks before and 4 weeks after the introduction of the leaflet was elicited by case note review. The acceptability of the leaflet was determined by means of a questionnaire given to patients.

**Results:** The use of the leaflet increased the number of patients offered an HIV test from 654 of 1004 (65%) patients to 371 of 397 (94%),  $p < 0.001$ . It also increased the number tested from 325 (32%) of 1004 patients to 210 of 397 (53%,  $p < 0.001$ ). Men were more likely to be offered an HIV test than women at baseline (342 of 500 men, 68%, v 312 of 504 women, 62%,  $p = 0.036$ ) but after the intervention there was no longer a difference (men 217, 93%, female 154, 94%). The number of men accepting a test increased more than the number of women (139 of 233 men, 60%, 71 of 164 women, 43%,  $p < 0.005$ ). The 79 questionnaires suitable for analysis showed patient views on the leaflet were mainly favourable: easy to understand 73 (92%), clear 70 (89%), absence of difficult words 73 (91%), and right balance of information 68 (86%).

**Conclusions:** The routine use of a leaflet to replace verbal pretest discussion (PTD) increased the proportion of patients undergoing testing. Part of the increased testing was because physicians were more likely to offer the test, possibly because the time constraints of pretest discussion were removed. This appears to be an acceptable and effective way of increasing HIV testing in GUM clinics but further work is needed to elicit information on non-responders to the questionnaire.

See end of article for authors' affiliations

Correspondence to:  
Karen Rogstad, Department  
of Genitourinary Medicine,  
Royal Hallamshire  
Hospital, Sheffield, UK;  
karen.rogstad@sth.nhs.uk

Accepted for publication  
29 November 2002

The advantages of early diagnosis of HIV infection are now well recognised. Knowledge of their HIV status allows patients to access treatment with HAART (highly active antiretroviral therapy), and take prophylaxis against opportunistic infections such as *Pneumocystis carinii* pneumonia. It also enables them to make changes in their sexual behaviour to prevent onward transmission to partners. In infected women who are already pregnant knowledge of their HIV status allows choices to be made on termination or to participate in methods to reduce vertical transmission by the use of drugs, caesarean section, and the avoidance of breast feeding. A national policy has been introduced in the United Kingdom for the antenatal testing of all pregnant women, with a target of 90% of women having an HIV test by the end of 2002.<sup>1</sup> This policy has already resulted in a decrease in the number of pregnant women who are unaware that they are infected with HIV.<sup>2</sup>

Prevalence data combined with data from the National Survey of Sexual Attitudes and Lifestyle estimate there are more than 33 000 people living in the United Kingdom who are infected with HIV and more than one third of these are unaware of their status.<sup>3</sup> Genitourinary (GU) clinic attenders are known to have a higher incidence of HIV infection than the general population with women attenders having a three times higher incidence of HIV than pregnant women.<sup>2</sup> The recent publication of the government's national strategy for sexual health and HIV has highlighted the importance of testing this group and has set targets of all GU clinic attenders being offered an HIV test on their first screening for sexually transmitted infections (STI) by the end of 2004 with a view to increasing the uptake of testing by those offered it to 40% by the end of 2004 and to 60% by the end of 2007.<sup>4</sup>

However, studies have shown that only 23% of GU clinic attenders perceived as low risk had an HIV test and 29% of high risk attenders were not offered an HIV test.<sup>5</sup> Previous attempts to increase testing in the Department of Genitourinary Medicine in Sheffield had produced a modest increase only.<sup>6</sup>

Because of low testing rates in our department a leaflet was developed with the aim of increasing the number of patients offered and accepting an HIV test by "normalisation" of testing, reducing the time involved in verbal pretest discussion and reducing the impact of healthcare workers attitudes to testing on the patients decision making process.

#### SETTING AND METHODS

The study took place in the STI clinic of a large teaching hospital in the United Kingdom. A leaflet was designed in collaboration with the BMA Foundation for AIDs, now renamed the Medical Foundation for AIDS and Sexual Health, a charity supported by the BMA. Development of the leaflet included input from doctors, nurses, health advisers, and reception staff working in the GUM department. The leaflet explained all tests that were routinely performed in the clinic including the HIV test. Information normally given to patients during verbal pretest counselling such as the window period (the 3 month period between infection and sero-conversion when detectable anti-HIV antibodies can be detected) and insurance issues (refusal of life/sickness insurance or mortgages) was covered. Before this, information on the HIV test was given verbally to patients by the doctor who interviewed the patient.

From January 2000 all new attenders at the routine STI clinics of the Department of Genitourinary Medicine at the Royal Hallamshire Hospital, Sheffield, were given the leaflet when they booked in. During the consultation medical staff obtained verbal consent from the patient for an HIV test to be performed after eliciting that they had read the leaflet. Those who required further information or were from high risk groups as identified during routine sexual history taking were offered further discussion with either the doctor or a health adviser. Those patients who had not read the leaflet or where there were special issues—for example, occupational or cultural issues, inability to access treatment in the future, or anxiety were given additional information. Case notes were stamped so that there was clear documentation on whether a patient had been offered and accepted testing.

Data on the offering and acceptance of HIV testing were collected 6 weeks before the introduction of the leaflet and 4 weeks following its introduction.

The acceptability of the leaflet to patients was determined by a self completed questionnaire given to 220 patients (questionnaire 1). A more detailed questionnaire (questionnaire 2) was then given to a further 100 consecutive patients (50 male, 50 female).

The acceptability of the leaflet to staff was assessed by means of a self completed anonymous questionnaire.

Data were analysed using  $\chi^2$  on EPI-INFO.

## RESULTS

Before the introduction of the leaflet 654 of 1004 (65%) patients were offered an HIV test (the baseline) and men were more likely to be offered than women (342 of 500 men, 68%, *v* 312 of 504 women, 62%, *p*=0.036). The leaflet resulted in a significant increase in the number of patients offered a test to 371 of 397 (94%, *p* <0.001), and there was no longer a difference between men and women (male 217, 93%, female 154, 94%).

At baseline 325 (32%) of 1004 patients were tested for HIV and the proportion of men and women tested was similar (164 of 500 men, 161 of 504 women). After the introduction of the leaflet there was a significant increase in testing to 210 of 397 (53%, *p* <0.001). However, the number of men accepting a test increased more than the number of women (139 of 233 men, 60%, 71 of 164 women, 43%, *p* <0.005).

### Patient questionnaire 1

In all, 110 of the 220 questionnaires were returned and 109 were suitable for analysis, a 50% response rate. Of the 109, 105 (96%) had read the leaflet and all but one thought it easy to understand. Four patients thought some areas needed to be made clearer but none of these related to the section on HIV.

### Patient questionnaire 2

A total of 81 of the 100 questionnaires were returned, and 79 were suitable for analysis (36 male, 20 female, 23 unknown), a response rate of 79%. Demographic data were available for 56. Mean age of respondents was 27 years, range 17–57. These ethnic groups were divided into white 44 (79%), black Caribbean five (9%), black African one (2%), Asian three (5%), other three (5%). Ethnic breakdown of clinic attenders was white 86%, black Caribbean 6%, black African 1%, Asian 3%, other 3%. The majority of patients were pleased or not bothered about routinely being offered an HIV test (40, 51% and 28, 35% respectively), 10 (13%) were upset, and four (5%) gave no reply. Patient views on the leaflet were easy to understand 73 (92%), clear 70 (89%), absence of difficult words 73 (91%), and right balance of information 68 (86%). Four (5%) found it difficult to understand, six (8%) felt that it needed to be clearer, and four (5%) thought there were difficult words. The amount of information in the leaflet was felt to be about right by 68 (86%), not enough by eight (10%), too much by

one (9%), and two (3%) gave no reply. Thirty two (41%) found the leaflet reassuring, two (3%) thought it worrying, 21 (27%) found it both worrying and reassuring, 20 (25%) found it neither reassuring nor worrying, and four (5%) gave no reply.

### Staff questionnaire

A total of 20 staff responded (four consultants, three other medical, three nurses, four health advisers, six reception). Attitudes to the leaflet were: useful 19, right length 19, comfortable with its use 19. Seven thought it had encouraged them to offer an HIV test, for six it had made no difference. Only two had concerns about its use. Only one thought it needed to be altered, and that was to add in for men not to pass urine before attendance, as some patients were taking the leaflet home and giving it to their partners before their attendance.

## DISCUSSION

There are low and variable rates for HIV testing in GUM clinics. Reasons for low rates could be either the time required for formal HIV pretest discussion or the personal views and prejudices of those healthcare workers involved with offering the test or giving pretest discussions.<sup>7,8</sup> A previous study in our department has shown that using a prompt to remind doctors produced a significant increase in testing rates from 27% to 32%.<sup>6</sup> This is still too low and is far below the 90% target for pregnant women.

We have shown the routine use of a leaflet containing information on the HIV test as well as other tests produced a marked increase in the uptake of testing to that recommended as the target for 2004 in the national sexual health and HIV strategy, and for men achieved the target for 2007. Part of the increase in uptake is because more patients are being offered the test, which at 94% almost reaches the government target of 100%. The reason for an increased number of patients being offered the test may be that there is little increase in consultation time if written information is given, or that the leaflet has made staff feel more comfortable about raising the topic with patients. The increase in testing may also be because the leaflet has produced a “normalisation” of testing so patients do not feel stigmatised by being offered or accepting a test, and they may prefer not to have the time constraints of formal pretest discussion. Patient and healthcare worker views have shown the use of a leaflet to replace formal pretest discussion is acceptable to the majority. It was not possible to determine demographic data on patient non-responders and there were few teenage respondents. Additionally, those who found the leaflet difficult to read or understand may have been less likely to fill in a questionnaire about it. It is therefore essential that the option of verbal discussion remains available for those who require it. Special care must be taken for those unable to read it either because of language or literacy problems or for those with incomplete understanding because of immaturity or special needs.

Further work is needed to explore why women are less likely to accept testing and how uptake in women and men can be improved further, although there will always be some patients who decline testing and their right to do so must be respected. Other areas for future research include whether the leaflet would have the same effect in other STI clinics or in different healthcare settings, as attempts to increase testing in another STI clinic by dispensing with verbal pretest discussion resulted in testing rates of only 10.8–20%.<sup>9</sup> In-depth investigation of patient attitudes and the most appropriate content of leaflets for various patient groups also needs to be assessed.

A multidisciplinary approach, which was used in the development of this leaflet, with staff and patient feedback, is likely to have contributed to the success of this project.

We advocate that the routine use of a leaflet such as this should be considered by all STD clinics to increase the uptake

### Key messages

- A leaflet on HIV testing to replace verbal pretest discussion is acceptable to staff and patients
- Increased number of HIV tests are performed if a leaflet is used
- Men are more likely to be tested than women

of testing with minimal increase in health adviser or doctor consultation time. It may also be useful in general practices providing level 1 and 2 care as they take on more responsibility for HIV testing, as advocated in the sexual health and HIV strategy. HIV testing is part of an STI screen and if it is not offered to all then clinics are failing to provide an adequate service for their clients and will fail to meet the sexual health and HIV strategy targets. Only by offering a test to all can normalisation of testing occur and the previously undiagnosed have the opportunity for diagnosis and appropriate medical care.

In view of the targets for HIV testing set in the national strategy for sexual health and HIV and in the light of this research, the Department of Health needs to review and rewrite its guidance on pretest discussion.<sup>10</sup> Additionally, in the light of this research, government targets, and the fact that HIV testing is preceded by written and not verbal information in antenatal and blood donation settings, the General Medical Council needs to take these issues into account when revising its guidance on serious communicable diseases.<sup>11</sup>

Funding: none.

Conflict of interest: none.

### CONTRIBUTORS

KR, design of leaflet and questionnaires, data analysis, writing of manuscript; LB, design of leaflet and questionnaires, data analysis; RL, design of leaflet and questionnaires, writing of manuscript; GK, design of leaflet and questionnaires, writing of manuscript.

### Authors' affiliations

**K E Rogstad, L Bramham, G R Kinghorn**, Department of Genitourinary Medicine, Royal Hallamshire Hospital, Sheffield, UK  
**R Lowbury**, Medical Foundation for AIDS and Sexual Health (formerly BMA Foundation for AIDS), UK

### REFERENCES

- 1 **UK Health Departments**. *Targets aimed at reducing the number of children born with HIV: report from an expert group*. London: Stationery Office, 1999.
- 2 **CDSC**. Prevalence of HIV and hepatitis infections in the UK in 2000. *Commun Dis Rep CDR Weekly* [serial online] 2001; [cited 29 November 2001]:11(48).
- 3 **Johnson AM**, Mercer C, Erens B, *et al*. Sexual behaviours in Britain: partnerships, practices and HIV risk behaviours. *Lancet* 2001;**358**:1835–42.
- 4 **Department of Health**. *The national sexual health and HIV strategy*. London: DoH, 2001.
- 5 **British Co-operative Clinical Group**. Screening for HIV infection in genitourinary medicine clinics: a lost opportunity? *Sex Transm Infect* 2000;**76**:334–7 (or 307–10).
- 6 **Rogstad KE**, Bramham L, Kinghorn GR. Increasing the uptake of HIV testing in a STD clinic by different methods. *MSSVD Spring Meeting Belfast 24–26 May 2001 Abstract* (to be completed).
- 7 **Griffiths M**, Stockdale H, Winter AJ, *et al*. Uptake of HIV testing in a genitourinary medicine clinic is affected by individual doctors. *Sex Transm Infect* 2001;**77**:143–4.
- 8 **Jones S**, Sadler T, Low N, *et al*. Does uptake of antenatal HIV testing depend on the individual midwife? Cross sectional study. *BMJ* 1998;**316**:272–3.
- 9 **Munday PE**, Mullan HM. Encouraging HIV testing in GUM clinics—can we dispense with the pre-test discussion? *Int J STD AIDS* 1999;**10**:728–9.
- 10 **Department of Health**. *Guidelines for pre-test discussion on HIV testing*. London: DoH, 1996.
- 11 **General Medical Council**. *Serious communicable diseases*. London: GMC, 1997.