Key messages

- Application of current policy on voluntary confidential testing for infection with HIV in genitourinary clinics in England and Wales fails to identify a substantial proportion of infected patients, particularly among heterosexual patients but also among homosexual and bisexual men
- The proportion of infections with HIV-1 among homosexual and bisexual men and heterosexual women that remained undetected at the end of a clinic episode fell between 1990 and 1993
- The coexistence of HIV-1 infection and recently acquired sexually transmitted disease provides evidence of continuing unsafe sexual behaviour among homosexual and bisexual men infected with HIV-1 and attending a genitourinary clinic up to the end of 1993
- The results indicate that those who know they are infected with HIV often do not adopt safer sexual practices, which raises questions about the effectiveness of counselling after tests and the potential benefits of policies designed to encourage HIV testing

have also found that knowledge of being positive for HIV does not necessarily result in the adoption of safer sexual practice.¹⁰ This suggests a failure to deliver effective health education messages to those at highest risk for acquiring HIV and to those who have been diagnosed as being infected with HIV.

The sexual health target for reduction of infection with gonorrhoea set in the government's *Health of the Nation* strategy has been achieved.¹¹ None the less, high levels of sexual ill health continue.^{12,13} New targets are needed for HIV prevention, particularly ones focusing on homosexual or bisexual men.¹²⁻¹⁵ The measures from this unlinked anonymous programme of unrecognised HIV infections seen in genitourinary medicine clinics and acute sexually transmitted diseases seen in men aware of their HIV infection would seem to be suitable targets for clinically relevant national control programmes.

This survey would not have been possible without the support of clinical, clerical, and laboratory staff at clinics and hospitals, whose help is gratefully acknowledged. The development of this survey and others in the HIV prevalence monitoring programme in England and Wales benefited

from discussions with colleagues at the Scottish Centre for Infection and Environmental Health and with Dr A V Swan of the PHLS Statistics Unit.

The members of the survey group from 15 clinics and associated laboratories comprised J Anderson, P Carey, C Carne, D Carrington, L Claydon, A Codd, J Coleman, J Connelly, F Davidson, S Drake, G Kinghorn, G Kudesia, A Lawrence, N Lightfoot, R Maw, P R Mortimer, J Munro, S Murphy, K Mutton, J Pennington, A Pozniak, M Prince, K Radcliffe, N Sankar, M S Shafi, D Shanson, S Skidmore, C Sonnex, R Sparks, A Uttley, A Wade, P Watkins, P Wilson, T Wisdom, T Wreghitt, and G Zelin.

P Carey, C Carne, J Coleman, S Drake, A Lawrence, P R Mortimer, J Munro, K Mutton, D Shanson, C Sonnex, R Sparks, A Wade, and T Wreghitt contributed to the data presented in this analysis.

Funding: the Medical Research Council with funds provided by the Department of Health.

Conflict of interest: None.

- 1 Anon. Heterosexual AIDS: pessimism, pandemics, and plain hard facts. *Lancet* 1993;341:863-4.
- 2 Gill ON, Adler MW, Day NE. Monitoring the prevalence of HIV: foundations for a programme of unlinked anonymous testing in England and Wales. *BMJ* 1989;299:1295-8.
- 3 Noone A, Mortimer JY. Voluntary testing to measure HIV prevalence in sexually transmitted disease clinics. *Commun Dis Rep CDR Rev* 1992;2: R21-4.
- 4 Jones JL, Hutto P, Meyer P, Dowda H, Gamble WB, Gunn RA. HIV seroprevalence and reasons for refusing and accepting HIV testing. *Sex Transm Dis* 1993;20:334-7.
- 5 Groseclose SL, Erickson B, Quinn TC, Glasser D, Campbell CH, Hook EW. Characterization of patients accepting and refusing routine, voluntary HIV antibody testing in public sexually transmitted disease clinics. *Sex Transm Dis* 1994;21:31-5.
- 6 PHLS AIDS Centre, PHLS Virus Reference Division, PHLS Statistics Unit, Academic Department of Genitourinary Medicine University College and Middlesex School of Medicine, and Collaborators. Unlinked anonymous monitoring of HIV prevalence in England and Wales: 1990-92. *Commun Dis Rep CDR Rev* 1993;3:R1-11.
- 7 Nardone A, Rogers P, Joyce C, Nicoll A, Mercey D. The interpretation of trends in HIV seroprevalence amongst homo/bisexual men attending a GUM clinic in central London (poster). In: Proceedings of the Medical Research Council ninth annual AIDS research workshop; 1995 September 4-6; Manchester. (Abstract 29.)
- 8 Evans BG, Catchpole MA, Heptonstall J, Mortimer JY, McGarrigle CA, Nicoll AG, et al. Sexually transmitted diseases and HIV-1 infection among homosexual men in England and Wales. *BMJ* 1993;306:426-8.
- 9 Tomlinson DR, French PD, Harris JRW, Mercey DE. Does rectal gonorrhoea reflect unsafe sex? *Lancet* 1991;337:501-2.
- 10 Higgins DL, Galavotti C, O'Reilly KR, Schnell DJ, Moore M, Rugg DL, et al. Evidence of the effects of HIV antibody counselling and testing on risk behaviors. *JAMA* 1991;266:2419-29.
- 11 Health Education Authority. *Health update 4: sexual health*. London: Health Education Authority, 1994.
- 12 Report of an Expert Group (Chairman Professor NE Day) The incidence and prevalence of AIDS and prevalence of other severe HIV disease in England and Wales for 1995-1999: projections using data to the end of 1994. *CDR Rev* 1996;6:R1-24.
- 13 Unlinked Anonymous HIV Surveys Steering Group. *Unlinked anonymous HIV prevalence monitoring programme in England and Wales. Update data to the end of 1994*. London: Department of Health, Public Health Laboratory Service, Institute of Child Health, 1995.
- 14 Stall R. How to lose the fight against AIDS among gay men. *BMJ* 1994;309:685-6.
- 15 Miller E, Tedder RS, Sutherland S, Mortimer PP, Shafi MS. Incidence of HIV infection in homosexuals attending genitourinary medicine clinics in London, 1988-94. *BMJ* 1995;311:545.

(Accepted 5 December 1995)

Department of Clinical Pharmacology and Therapeutics, Charing Cross and Westminster Medical School, London SW10 9NH
M D Feher, lecturer
A F Lant, professor

Pharmacy Departments, Chelsea and Westminster Hospital, London SW10 9NH and Kings College Hospital, London SW3 6LX
J P Simms, senior pharmacist

Correspondence to: Dr Feher.

BMJ 1996;312:542-3

History of chickenpox and steroid cards: a new warning?

M D Feher, J P Simms, A F Lant

National steroid cards were designed to inform patients treated with corticosteroids of the dose and potential hazards of treatment. Recent reports of severe chickenpox associated with steroid treatment^{1,2} have highlighted a potential need to amend the current steroid card. In May 1994 the Chief Medical Officer wrote to all doctors in the United Kingdom regarding the hazards of exposure to chickenpox.³ With this background, we asked patients taking oral steroid treatment about the information they had received from their doctors.

Patients, methods, and results

Between September and November 1994 all patients who presented to the outpatient pharmacy of Chelsea and Westminster Hospital with a prescription for oral prednisolone were interviewed. Patients completed a standardised questionnaire asking their age, whether they carried a steroid card, if they had had chickenpox, and their doctors' instructions on stopping steroids and side effects. Patients were also asked about the condition for which they considered the prednisolone had been prescribed, together with the dose and duration of treatment.

A total of 105 consecutive patients presented with a prescription for steroids during the three month study. Of these, 102 (46 male and 56 female) patients (or accompanying immediate family with a child patient) fully completed the questionnaire; the median age of patients was 50 years (range 1 to 92).

Fig 1—Standard steroid treatment warning card (left) compared with Chelsea and Westminster Hospital's warning on chickenpox for all patients receiving steroid treatment (right).

About one in seven patients were unable to give details of the condition for which they had been prescribed steroids. Over a third of the patients had received their first course of oral steroids during the survey period. Of the 66 patients who had been treated previously with steroids, 45 (67%) carried a steroid card; this included 14 patients who had been treated for less than one month, 20 for one to six months, and 32 for more than six months. Previous chickenpox was acknowledged in 75 and denied in 21; six of the 102 patients surveyed were uncertain. Doctors' instructions on not stopping treatment suddenly was recalled by 60 patients, and 63 acknowledged being given advice on potential side effects of steroids. Only 24 confirmed that the doctor had specifically asked about chickenpox and only 15 had been advised about chickenpox in association with their treatment. All 27 patients who recalled no previous chickenpox (or were uncertain of it) had received no specific information from their doctor at the time of the steroid prescription about the potential hazards of chickenpox.

Comment

This survey highlights a need to update steroid cards for the benefit of both patients and prescribing doctors.

Steroid cards were designed in 1961 by the Department of Health and to our knowledge have not been modified since their introduction. Distribution is through the Royal Pharmaceutical Society of Great Britain. The cards do not give specific warnings about the hazards of chickenpox with steroid treatment. Although most of the survey patients who had previously been treated with steroids carried a steroid card, only half could recall of their doctor's advice on side effects. Even though the true prevalence of immunity to varicella in patients who are uncertain of previous chickenpox infection may be high,² there is a clear risk for those who do not have antibodies to varicella.^{1,2} The universal omission of advice regarding exposure to chickenpox in those patients within the present survey who had no recall of having had chickenpox reinforces the need for written instructions regarding potential severe adverse reactions with steroids.^{3,4}

Patient information leaflets detailing drug precautions have been included by the manufacturers in only a limited number of steroid preparations but are due to be included with all steroid preparations as part of the Medicines Control Agency's patient pack initiative. As with other drug safety warnings, dated amendments should be made regularly if the steroid card is to have clinical relevance, particularly as it is reproduced in each edition of the *British National Formulary*. Our hospital now issues a separate written warning regarding chickenpox with all prescriptions for corticosteroids.

Funding: None.

Conflict of interest: None.

1 Dowell SF, Bresee JS. Severe varicella associated with steroid use. *Paediatrics* 1993;92:223-8.

2 Rice RB, Simmons K, Carr R, Banatvala J. Near fatal chickenpox during prednisolone treatment. *BMJ* 1994;309:1069-70.

3 Department of Health. *Corticosteroids and varicella-zoster virus*. CMO's update 2. London: DoH, 1994.

4 Severe chickenpox associated with systemic corticosteroids. *Current problems in Pharmacovigilance*, Vol 20. London: Committee on Safety of Medicines, 1994.

(Accepted 11 October 1995)

Suicide and deprivation in Scotland

Philip McLoone

Public Health Research Unit, University of Glasgow, Glasgow G12 8RZ
Philip McLoone, research fellow

BMJ 1996;312:543-4

In Scotland the analysis of deaths in small geographical areas showed an association between suicide rates and economic deprivation.¹ This suggested that the recent increase in rates among young people has been greatest in deprived areas. Because of continuing concerns about rising suicide rates among young men I investigated the association with deprivation further.

Subjects, methods, and results

The General Register Office for Scotland provided data on all deaths by suicide (codes E950-959 in the revision of the *International Classification of Diseases*) and deaths undetermined whether accidentally or purposely inflicted (codes E980-E989) which had occurred among Scottish residents between 1981 and 1993. Undetermined deaths were considered to be suicide, and death rates were standardised to the World Health Organisation's European population. I investigated the associations with deprivation by using

Carstairs deprivation scores to group postcode sectors into three groups described as affluent, average, and deprived.² The three categories included about 20%, 60%, and 20% of the Scottish population.

Between 1981-3 and 1991-3 suicide rates among men aged 15-29 increased by 66% (table 1), but the rate among those aged 30 showed little change. Rates among young women also increased, but in those aged 30 or more the rate fell by 28%. For men and women and in both age groups there was a gradient in suicide rates across the deprivation categories, with lower rates in more affluent areas. Suicide rates for men and women aged 15-29 rose in all categories, but this rise was greatest in deprived areas. By 1991-3 suicide rates in young men and women living in deprived areas were about twice the rates of those living in affluent areas.

When I examined the method of committing suicide, rates in deprived areas were higher for each method, with the exception of the use of car exhausts. Among men in deprived areas the greatest increase occurred in rates of self poisoning and hanging. In contrast, in affluent areas the largest rise occurred in the use of car exhaust fumes.

Comment

Suicide may be characterised as the result of an inability to cope with severe psychological stress and