

# Human immunodeficiency virus infection in a Dublin general practice

GERARD BURY

FERGUS O'KELLY

*SUMMARY. A group general practice in Dublin's inner city has had extensive experience of intravenous drug users since the late 1970s. Since 1985 a total of 54 human immunodeficiency virus (HIV) seropositive patients have attended the practice, of whom 48 are intravenous drug users, four are the children of drug users and two have been infected through sexual contacts. Three patients have developed the acquired immune deficiency syndrome and at least eight have symptomatic HIV disease. Sixty per cent of Ireland's seropositive population have been infected through intravenous drug abuse but nationally only 16% of all intravenous drug users tested are seropositive; in the study practice, however, at least 35% (48/137) of known intravenous drug users are seropositive.*

## Introduction

**I**NTRAVENOUS heroin use has become a serious problem in Dublin's inner city since the late 1970s. Those affected have mostly been young people with poor educational and employment records who live in local authority housing complexes.<sup>1</sup> Although it has been estimated that as many as 7000 people have used intravenous heroin since the late 1970s, there is evidence of a recent decline in the numbers of new users.<sup>2,3</sup> Ireland's intravenous drug problem is concentrated in Dublin and there is little evidence of a serious problem outside the city.<sup>1</sup>

The management of drug addiction in Dublin has centred on one drug advisory and treatment centre which offers detoxification, maintenance programmes and counselling. General practitioners are encouraged to refer patients to this centre for management of addiction but many drug using patients continue to attend their general practitioner with other problems.

The study practice is located in Dublin's inner city and has a registered General Medical Service population of 3000 and about 2000 private patients. There are two full-time doctors, two part-time doctors from the academic staff of the department of general practice at the Royal College of Surgeons in Ireland and a trainee. The practice has had extensive experience with a population of intravenous drug users since 1979.

Up to June 1988, 17534 tests for antibodies to the human immunodeficiency virus (HIV) had been carried out in Ireland and 742 individuals had been found to be seropositive.<sup>4</sup> Sixty per cent of the seropositive population have been infected

through the intravenous use of drugs and this is similar to the situation in Edinburgh.<sup>5</sup> In Ireland, homosexual or bisexual intercourse accounts for about 10% of the seropositive population whereas in the UK this is the route of infection for over 80% of the total.<sup>6</sup> Heterosexual intercourse accounts for only a small number of seropositive individuals in Ireland. Of the 2701 intravenous drug users tested in Ireland, only 16% are seropositive; this is in marked contrast to Edinburgh where up to 50% of intravenous drug users tested are positive.<sup>5</sup> It has been suggested that Ireland's most serious problems with the acquired immune deficiency syndrome (AIDS) may result from intravenous drug users acting as a 'bridge' for the virus into the non-drug using heterosexual population.<sup>7</sup>

## Method

Since 1985 the study practice has kept a register of all patients who are found to be HIV seropositive when tested or who report a positive result to a test carried out elsewhere. Information was compiled from practice records on each of these individuals for the period October 1985 to May 1988. A separate register is kept of all those who are known to be current or past users of intravenous drugs.

## Results

Over the period 1978-88 the practice has dealt with 137 intravenous drug users, of whom approximately 123 are felt to have been genuinely seeking help with their problems while the remainder attended on only one or two occasions and were intent solely on obtaining controlled drugs. Three of the 137 drug users are known to have died.

The practice has dealt with 54 patients who are known to be HIV seropositive. This group includes 48 intravenous drug users (35% seroprevalence, 48/137), four children of intravenous drug users and two people who have been infected through sexual contacts. One of the latter two has been the regular sexual partner of an intravenous drug user, but has never used drugs and the other has had no contacts with drug users at any stage, but is in another high-risk group. Two of the intravenous drug users are known to have died, one by committing suicide shortly after the result of the HIV test was known and the other from drugs related causes.

Only six of the seropositive intravenous drug users were known to the practice before they began to use drugs. The majority of the group attended the practice fairly regularly and only nine have made less than five visits (mean number of visits was 12).

The age and sex breakdown of both intravenous drug users and HIV seropositive patients is shown in Table 1. It is

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G. Bury, MRCPI, MRCGP, MICGP, lecturer, Department of General Practice, Royal College of Surgeons in Ireland, Dublin and F. O'Kelly, LRCPI, LRCSI, MICGP, general practitioner, Dublin.

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**Table 1.** Age and sex breakdown of the intravenous drug users and HIV seropositive patients.

	Number of patients	
	Intravenous drug users ( <i>n</i> = 137)	HIV seropositive Patients ( <i>n</i> = 54)
<i>Age (years)</i>		
0-3	–	4
4-17	–	–
18-25	56	23
26-30	49	16
31 +	32	11
<i>Sex</i>		
Male	93	38
Female	44	16

*n* = total number of patients.

noteworthy that the proportion of female intravenous drug users who are seropositive (12 out of 44, 27%) is considerably lower than the proportion of male users who are infected (36 out of 93, 39%). Of the 54 patients who are HIV seropositive, 50 are adults — 40 are single, six are married and four are separated; they have a total of 48 children. Eight of the children and 13 sexual partners are felt to be at high risk of infection with HIV but the practice has/no knowledge of tests being carried out.

In Dublin heroin abuse is a problem which affects specific highly vulnerable groups. Of the 54 seropositive individuals in this study, 29 have an infected relative, spouse or boy or girlfriend within the group; 34 patients have had a settled address in one of three local authority housing complexes nearby; and 37 family units are represented within the total of 54 people.

Of the 48 seropositive intravenous drug users 12 began to use heroin before or during 1978; 28 began between 1979 and 1982 and only four began between 1983 and 1985 (no information was available for the remaining four). It is thought that 21 are no longer using drugs by injection but that a further 21 continue to inject (no information for the remaining six).

Three of the 54 seropositive patients have developed clinical characteristics of AIDS and one has been treated with and responded well to zidovudine. Eight others are known to have symptomatic HIV disease. Two patients are pregnant.

The year of testing and cumulative number of cases known to the practice are listed in Table 2. Tests for HIV seropositivity became available in October 1985. The test was carried out in the practice for nine patients, in prison for 13 and in hospital for 20 (no information for remaining 12 patients). While many patients informed the practice soon after their test was carried out in prison or hospital, others were not seen or did not volunteer the information for some time. Among the 54 patients, 22 said that they received counselling before their test but, worryingly, 17 patients said they received no such counselling or were unable to remember any counselling (no information was available for the remaining 15 patients).

**Table 2.** Year of HIV testing and the cumulative number of seropositive patients known to the practice.

	Number of seropositive patients	
	Year of testing	Practice aware (cumulative total)
1985	13	3
1986	16	19
1987	10	40
1988	3	54
No information	12	–

## Discussion

This practice's experience with HIV related problems is probably unique in general practice in Ireland. However, the practice itself is a normal group practice whose experience in the field has arisen because of its location and the practice's policy of handling any problem which members of the local community may wish to bring along.

Intravenous drug users are seen in the same surgery sessions as other patients and can expect empathy and care for their problems, although prescriptions for controlled drugs are not issued. These are obtained when necessary from the drug advisory and treatment centre. The practice has not changed its policy towards drug users despite the increased prevalence of HIV related problems.

The number of HIV seropositive patients who have attended the practice reflects the severity of the area's problems with intravenous drug abuse during the late 1970s and early 1980s. No generalizations can be made from this practice's experience but other parts of Dublin, which have in the past reported serious local drug problems, may now have similar problems with HIV infection.

Although, nationally, only 16% of drug users who have been tested are HIV seropositive, in this practice at least 35% are seropositive. As well as the many seropositive patients already attending, the practice is aware of many other intravenous drug users, spouses, partners and children who may also be infected. The dimensions of the problems which face families, carers medical services and other agencies in the area may therefore be significantly underestimated by the index cases reported here.

General practice has much to offer in the care of drug users.<sup>8</sup> The unique relationship which exists between many general practitioners and their patients may be an important resource in educating and motivating those who are seropositive to reduce their high risk behaviour. However, evidence has shown that only about half of HIV seropositive patients attending hospital had informed their general practitioner of the diagnosis; although many felt that their general practitioner was not well informed about AIDS, many wished general practitioners could take a bigger part in their care.<sup>9</sup>

Sixty per cent of Ireland's seropositive population have been infected through intravenous drug abuse. The roots of this problem lie not in medical but in social and environmental issues, such as unemployment, poor education, high density housing and young people who are vulnerable to the attractions of the drug using culture. The medical problems associated with AIDS should not divert attention from the fundamental non-medical issues from which intravenous drug abuse arises.

The practice policy on testing is to counsel anyone who requests an HIV test about the implications of a positive or

negative result. Counselling must also assess the high risk behaviour of the patient and ensure that they understand how this behaviour places themselves and others at risk. It has been our experience that, after counselling, patients may postpone testing but may still modify their behaviour. It has been said that if a choice must be made between carrying out tests and counselling patients, then counselling is the more important activity.<sup>10</sup>

Intravenous drug users make up the bulk of both the practice's and the nation's population of HIV positive patients. Unlike other groups such as homosexuals and haemophiliacs, however, these people have virtually no opportunities or motivation to come together in self-help or support groups. In other high risk groups the existence of such structures seems to have played a role in containing the spread of HIV, so that intravenous drug users are one of the few high risk groups where HIV infection continues to increase. Society may have to recognize that the control of HIV spread and stopping intravenous drug abuse are separate problems which require separate solutions. Until recently the idea of teaching drug users to inject more safely was unacceptable but may now need to be considered carefully.

The issues of needle exchange, methadone maintenance and wider availability of condoms are controversial ones in Ireland at present. Until about three years ago condoms had limited availability in Dublin but are now available from a wide variety of outlets including family planning centres, pharmacies and some doctors' surgeries. Recent reports from England and Scotland have indicated that needle exchange schemes are reasonably successful at attracting clients but less successful at keeping them.<sup>11</sup> The view of the Department of Health is that each of these options may have limited value but must be implemented only as part of an overall programme for drug users and others at risk of AIDS.

The stigmas and possible Judicial implications of admitting to intravenous drug use have long been barriers which prevent users from seeking help, even from caring agencies. If such limitations are associated with efforts to educate and motivate drug users to change their high risk behaviour, then they are unlikely to succeed. Self help from

within the drug using culture may have much to offer in controlling HIV and caring for those who are infected<sup>8</sup> but must be encouraged and fostered before its value can be assessed.

The need for a variety of further research efforts is clear. This practice is already studying the workload and problems arising from both intravenous drug use and HIV seropositivity as well as examining possible ways of reducing high risk behaviour. However, the need to undertake research on specific strategies for the care of those who are infected and for the prevention of further spread of the virus has been highlighted by the report of the Royal College of General Practitioner's working party.<sup>12</sup> This research must be initiated on a far wider scale than is possible in a single practice,

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#### Address for correspondence

Dr G. Bury, Department of General Practice, Royal College of Surgeons in Ireland, 84/85 Harcourt Street, Dublin 2, Ireland.