Human immunodeficiency virus in drug misusers and increased consultation in general practice

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SUMMARY. The use of general practitioner services by a group of intravenous drug users was recorded over two two-year time periods 1984–85 and 1986–87. This was felt to represent the period of maximum change in awareness of human immunodeficiency virus (HIV) infection by patients and medical staff. Fifty patients were randomly selected: 25 who were HIV positive and 25 who were HIV negative. Between the two time periods a dramatic increase in consultation rate for both high risk and infected patients attending their general practitioner was recorded (318% and 172% increase, respectively). A small increase in attendance at the accident and emergency department (30% and 34% increase, respectively) was recorded for high risk and infected patients, and there was a large increase in attendance at the infectious diseases unit for infected patients but there was little effect on use of other hospital services. The implications for resource needs in the community are discussed.

Introduction

MUCH attention has been paid to the recent discovery of a large cohort of drug abusers infected with human immunodeficiency virus (HIV) in Edinburgh.[1-3] The effects of this on use and provision of services is still largely unknown, although provision of specialist services is increasing[4] and subgroups such as children born to infected mothers have attracted research and clinical resources.[5] In the community the initial expectation that cases of HIV infection and the acquired immune deficiency syndrome (AIDS) might be dealt with by these specialist services is being replaced by an increasing awareness of the requirements for non-specialist services[6,7] to support non-symptomatic patients and their families and patients who are between episodes of opportunistic infection or other problems which require inpatient investigation or treatment. Other centres have indicated that periods of inpatient treatment and attendance at hospital units are short, especially in the early phase of HIV infection.[8,9] The strong connection of HIV with drug misuse in Edinburgh and the devolution of responsibility for such problems to community agencies[10] means that primary care is increasingly involved with local HIV problems.

In order to begin to quantify the role of general practice in HIV problems the present study set out to document the use of medical services by a random sample of known intravenous drug users attending the Muirhouse medical group, which takes an active interest in drug misuse and HIV related problems. The paper compares the consultation rates over two time periods representing periods before and after local, national and international awareness of HIV and AIDS in an attempt to record any changes during this time which might be related to the knowledge and presence of HIV infection in this population. The surgery consultations were compared with those of hospital specialties over the same period and also to the surgery consultation rates for the whole practice population.

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Method

Two groups of 25 known intravenous drug misusers were selected from a larger cohort of 350 registered at sometime with the Muirhouse medical group: one group was positive for HIV antibodies, one group was HIV negative. Patients were selected randomly from those presently attending the surgery regularly and were only excluded if general practice records were not available for the study period 1 January 1984 to 31 December 1987. The two groups were of similar ages and social class. In the HIV seropositive group 19 were men and six women, in the seronegative group 21 were men and four women.

Using a standardized questionnaire, general practice case notes were examined for each patient to establish the use of general practice services — number of surgery attendances, home visits and defaulted appointments. These consultations included minor illnesses, some related to AIDS and/or drug misuse, recall appointments for prescription of maintenance or reducing substitute drugs, counselling and HIV testing and other appropriate problems. The use of hospital services — number of referrals and attendances at inpatient and outpatient departments as well as defaulted appointments — were recorded in the same way.

The data were recorded for two two-year time periods: January 1984 to December 1985 and January 1986 to December 1987. These were felt to represent two distinct periods of awareness of HIV in the community. Prior to 1986 HIV testing was not generally available and little knowledge was present in the cohort of drug users. Subsequent to widespread testing, publicity and national campaigning during the early part of 1986, awareness reached a high level. It is this change from obscurity to maximum intensity in local awareness which is the main interest of this paper.

Consultation rates for the whole practice population of 11 500 were calculated for each year of the survey for comparison. The results were analysed using a series of parametric and non-parametric statistics, primarily related t-tests and chi-square tests.

Results

For both groups of drug users and in both time periods the general practitioner was the most extensively used service. The number of consultations per patient ranged from one to 84 visits in 1984–85 and from two to 166 in 1986–87. In both periods the HIV seropositive patients attended more often than the seronegative group, although not significantly so (Table 1). Both groups had a statistically significant increase in consultation rate from the first to the second time periods ($P<0.001$) although the increase was greater for seronegative than for seropositive individuals (318% increase for the seronegative and 172% increase for the seropositive group). Annual consultation rates during normal surgery hours for the whole practice population were 3.8 and 3.4 for 1984 and 1985 respectively and 3.6 and 3.5 for 1986 and 1987.

Table 1. Visits to the general practitioner before and after the AIDS awareness campaign for the 25 intravenous drug users who were HIV seropositive and the 25 who were not.

	Number of visits over 2 years		Number of defaulted appointments over 2 years	
	Before	After	Before	After
Surgery				
HIV patients	545	1485	60	82
Non-HIV patients	270	1130	43	119
Home				
HIV patients	37	24	–	–
Non-HIV patients	18	43	–	–

The accident and emergency department was the next most frequently utilized service (Table 2). Attendance at accident and emergency increased by around one-third for both groups after awareness of AIDS. Seventy six per cent of infected patients attended in the first period and 52% of those uninfected (range one to five visits). In the second two-year period 64% of each group attended this department (range one to 11 visits).

For all the other services the mean attendance rate for both groups was less than one in both time periods, with the exception of outpatient visits to the infectious diseases unit where attendance by HIV infected drug users increased by 218% to a mean of 1.4 visits in the second time period.

Table 2. Outpatient visits and inpatient stays at hospitals before and after the AIDS awareness campaign for the 25 intravenous drug users who were HIV seropositive and the 25 who were not.

	Number of outpatient visits over 2 years		Number of inpatient stays over 2 years		Number of defaulted appointments over 2 years	
	Before	After	Before	After	Before	After
Accident and emergency						
HIV patients	41	55	0	0	0	0
Non-HIV patients	37	48	0	0	0	0
Infectious diseases						
HIV patients	11	35	7	6	4	1
Non-HIV patients	10	7	0	2	2	3
Obstetrics and gynaecology						
HIV patients	3	4	0	3	0	0
Non-HIV patients	4	4	0	1	3	0
Sexually transmitted diseases						
HIV patients	0	1	0	0	0	1
Non-HIV patients	1	2	0	0	0	0
General surgical						
HIV patients	3	7	1	6	3	5
Non-HIV patients	1	7	0	1	5	4
General medical						
HIV patients	4	8	3	1	7	2
Non-HIV patients	0	2	0	1	0	0
Psychiatric						
HIV patients	12	13	2	0	12	10
Non-HIV patients	3	4	0	1	3	9
Regional poison unit						
HIV patients	1	2	4	0	0	0
Non-HIV patients	2	4	0	1	0	0
Dental						
HIV patients	0	4	0	0	0	6
Non-HIV patients	1	2	0	0	0	2

Discussion

The large increase in general practice consultations by this sample of intravenous drug users when the practice consultation rate for the whole population was static is impressive and demands some explanation. The change in local policies regarding willingness to prescribe oral substitutes such as methadone and dihydrocodeine must have some part to play because of the requirement for careful supervision and regular review. The interest in HIV infection and drug use reflected nationally[11] may be a component but this perhaps changed less during the study period than the clinical and psychological state of the patients. The changes in availability of illegal drugs of abuse such as heroin undoubtedly explains part of the increase in general practitioner attendance.

Clearly there are a number of possible factors causing an increase in consultation rate in the practice. This increase is comparable to the increase observed in individuals commencing drug use[12] and represents an increased workload of considerable dimensions. This is increasingly important when it is remembered that the numbers of those with symptomatic HIV are growing rapidly.

The implications for general practice and other community agencies are clear. Resources should be made available in the primary care team and community services at a rate at least equal to those in specialist facilities. If this is not carried out then not only will prevention, research and treatment opportunities be missed but individuals with and without HIV infection will receive an inferior service.

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