London general practitioners' involvement with HIV infection

MICHAEL B. KING

SUMMARY. A total of 2510 general practitioners in the London postal districts were circulated with a questionnaire about their involvement with patients with human immunodeficiency virus (HIV) infection — 1261 (50%) replies could be analysed. Over half of the respondents had at least one patients who was HIV seropositive and most felt confident to handle such patients' psychosocial problems. Although almost 60% of doctors had attended at least one postgraduate teaching session on the acquired immune deficiency syndrome (AIDS), this had not allayed the anxieties of those doctors who were apprehensive about working with patients infected with HIV. Doctors had a positive attitude towards HIV infected patients and homosexuals, but wanted to be better informed by their patients or the hospital services. They seemed less prepared to deal with drug abusers. Doctors who had HIV positive patients and had graduated in the UK within the past 10 years were likely to have the greatest knowledge of, and most positive attitudes towards AIDS.

Introduction

GENERAL practitioners will become responsible for much of the health care of their patients with human immunodeficiency virus (HIV) infection and the acquired immune deficiency syndrome (AIDS).[1-3] There have been varying reports of their attitudes and involvement,[4-6] usually from small samples outside London, the city in the UK with the greatest concentration of patients with AIDS.[7] Earlier surveys concentrated on educational and public health issues and except for one study in Oxfordshire[5] took little cognizance of the psychosocial aspects of HIV infection, a domain in which general practitioners have an increasing role to play.[3]

This study sought information on: the amount of contact between London general practitioners and their HIV positive patients; how such patients are managed in general practice and the attitudes of general practitioners to the psychosocial, ethical and moral issues in AIDS.

Method

A three page postal questionnaire was designed. The first page collected information on the doctor's practice, attendance at postgraduate teaching sessions on AIDS and details of work with HIV problems. Subsequent pages contained nine questions exploring the doctor's knowledge and confidence about AIDS, five questions concerning his or her affective response to the disorder and 16 questions about the management of patients. Each was in the form of a statement to which one of five responses could be made from 'strongly agree' to 'strongly disagree', with a middle response of 'unsure'. A pilot questionnaire was completed by 40 general practitioners and modified to make it as clear as possible.

M.B. King, MD, MRCP, MRCGP, MRCPsych, senior lecturer, General Practice Research Unit, Institute of Psychiatry, London.

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A commercial mailing list was used to distribute the questionnaire with a covering letter to all NHS and private general practitioners, as well as general practitioner trainees, practising in the London postal districts. The survey was carried out in the spring of 1988 and one follow-up mailing was sent to all non-responders. The results reported here formed the first phase of an investigation of the work of general practitioners with HIV positive patients. A second phase, in which selected doctors have been interviewed, is in progress.

Results

Response rate and characteristics of responding doctors

The questionnaire was circulated to 2510 general practitioners of whom 14 wrote refusing to take part. A total of 1300 questionnaires (52%) were returned but of these, 13 were returned because the doctor had moved and a further 26 were completed incorrectly, leaving 1261 (50%) for analysis.

Of the respondents 817 were men, 416 were women and 28 did not indicate their sex and could not be assigned by name. The mean time spent in medical practice was 16.5 years with a range from under one year to 63 years. Nine hundred and thirty four respondents graduated in the UK, with the largest group of overseas doctors originating from the Indian subcontinent (178, 54% of overseas doctors). Six hundred and nineteen respondents practised in the eastern half of the city (postcodes SE, N, NE, E, EC) and 642 in the west (postcodes SW, NW, W, WC). The numbers of partners (including the respondent) ranged from one to 10, with 925 doctors (73%) working in practices of between one and four doctors. The mean number of patients per doctor was 2226.

Non-responders

Seventy non-responders were selected randomly and approached for interview as part of the second phase of this study. Of these, 15 had recently retired or moved. The majority of those who had moved were general practitioner trainees who had completed their time in a training practice. A further 10 refused interview. The 45 doctors successfully contacted did not differ significantly from those who had responded to the questionnaire in terms of country of graduation, years in medical practice, numbers of partners, location of practice in London or list size. Nor were they any more or less likely to have patients with HIV infection or AIDS on their list.

Involvement with HIV and AIDS

Of the respondents 689 (55%) had accumulated a range of experience with HIV infection as shown in Table 1. Five hundred

Table 1. Cumulated experience of HIV infection among the 1261 respondents.

Type of patient	Number (%) of doctors
HIV positive only	277 (*22*)
HIV positive, AIDS, AIDS death(s)	154 (*12*)
HIV positive, AIDS	128 (*10*)
AIDS only	38 (*3*)
AIDS death(s) only	35 (*3*)
HIV positive, AIDS death(s)	31 (*2*)
AIDS, AIDS death(s)	26 (*2*)

and ninety doctors reported at least one patient with HIV infection (mean 2.4 patients, range one to over 100), 346 doctors reported at least one AIDS patient (mean 2.0, range one to 40), and 246 at least one patient who had died of AIDS (mean 1.6, range one to 20). Thirty seven doctors, most of whom practised in west London, each had more than 10 patients with HIV infection. The remaining 572 doctors (45%) had never had a patient with HIV infection.

Seventy one per cent of responders (897 doctors) reported that one or more surgery attenders had approached them in the preceding two months concerned about AIDS. The numbers of worried patients ranged from one to over 100, with a mean of five.

Seven hundred and forty nine general practitioners (59%) reported that they had attended at least one postgraduate teaching session on AIDS. Fifty doctors had ordered an HIV antibody test without their patient's knowledge and four had done so on more than nine different occasions; 33 of these doctors (66%) had attended at least one teaching sessions on AIDS.

Of the 689 doctors who had had contact with an HIV positive patient at some time, 601 were able to give full details of the most recent consultation including the characteristics of the patients (Table 2) and what actions the doctors had taken (Table 3). Although the respondents were free to allocate patients to more than one risk category no doctor did so, thus it is uncertain how much overlap occurred between the categories. The 16 patients not allocated to any of the groups known to be at risk included those who had acquired the infection from a blood transfusion, spouses of HIV positive patients, prostitutes, and those for whom the doctor was uncertain of the risk factors. The commonest actions taken by general practitioners were: treatment of a physical problem, referral to a sexually transmitted disease clinic and counselling.

Attitudes and current practice

Most of the respondents (92%) felt that patients should inform them of their HIV status. Although only 45% of doctors considered that they had enough expertise to help HIV patients with day-to-day physical problems, the majority considered that patients with HIV infection and AIDS were likely to present more severe psychological problems than other patients (57%), that general practitioners should counsel patients in the long term (67%) and that patients had a right to support and counselling from their doctor (89%). Moreover, they were prepared to counsel patients' partners, to provide terminal care and to register known HIV positive patients as temporary or permanent patients. Although the majority (80%) did not believe that by treating HIV patients they would put other patients at risk of infection, 40% considered that they were at risk themselves.

Eighty seven per cent of respondents considered that patients who had contracted HIV infection via a blood transfusion were innocent victims and 69% considered that intravenous drug abusers had personality defects which made them difficult to work with. In contrast, a minority of respondents (36%) believed that homosexual men had brought the illness on themselves through their behaviour (some thought unwittingly), and 75% believed that homosexuals should be accorded the same legal rights and freedoms as heterosexuals.

Although only 40% of respondents generally advised patients in high risk categories to have an HIV antibody test, 69% wanted hospitals to inform them of all the HIV positive patients on their list. Again, whereas 63% of respondents believed that patients may not reveal their HIV status because of fears about confidentiality, only 30% felt there was any lack of confidentiality in their own notes.

Twenty five per cent of doctors in the survey felt, or predicted they would feel, apprehension in working with HIV positive patients. These doctors were less likely to have had contact with HIV positive patients (difference 14.7%, 95% confidence interval 8.8 to 20.6%, χ^2 (Yates) = 20.0, df=1, $P<0.001$), more likely to have graduated outside the UK (difference 6%, 95% confidence interval 0.5 to 11.5%, χ^2 (Yates) = 4.13, df=1, $P<0.05$) and more likely to consider themselves personally at risk (difference 33%, 95% confidence interval 24 to 30%, χ^2 (Yates) = 88.77, $P<0.001$). They were also more likely to practise in the eastern half of London (not statistically significant) but did not differ from other general practitioners as to attendance at study days, or years in practice.

Table 2. Characteristics of the 601 HIV positive patients seen in the most recent consultations.

	Male patients	Female patients
Homosexual/bisexual	456	–
Intravenous drug user	32	17
Haemophiliac	25	–
Heterosexual	26	29
Other	10	6
Total	549	52

Table 3. Action taken by doctors in the 601 most recent consultations with HIV positive patients.

Action taken by GP	Number (%) of consultations[a]
Treatment of physical problem	246 (*41*)
Counselling/support	231 (*38*)
Referral to STD clinic	203 (*34*)
Referral to other specialist	91 (*15*)
Treatment of a psychological problem	87 (*14*)
Routine visit – no particular action	55 (*9*)
Health education	53 (*9*)
Social intervention	20 (*3*)
Referral to hospital	9 (*1*)

[a]GPs sometimes took more than one action and thus the total is greater than 601. STD = sexually transmitted disease.

Analysis of attitudes

Each question on knowledge and affective response was scored 1–5 in the direction of increasing knowledge and positive views, respectively. Analysis of variance was used to look for significant, independent effects in the determination of mean scores for each section. Doctors with higher knowledge scores were significantly more likely to have been in medical practice for 10 years or less ($F = 14.03$, $P<0.001$), to have had at least one HIV positive patient on their list ($F = 36.26$, $P<0.001$), to have attended at least one study day on AIDS ($F = 24.60$, $P<0.001$) and to have graduated in the UK ($F = 46.21$, $P<0.001$). Doctors with more positive attitudes were also more likely to have practised for 10 years or less ($F = 48.43$, $P<0.001$), to have had one or more HIV positive patients ($F = 35.59$, $P<0.001$) and to have graduated in the UK ($F = 65.13$, $P<0.001$) but, in addition, they were also more likely to be women ($F = 21.98$, $P<0.001$). Having attended a study day had no significant effect on doctors' attitudes. There were no significant interactions.

The same analysis was performed for the combined score of knowledge and affect. Doctors with the highest scores had graduated in the UK 10 years ago or less and had HIV positive patients (Table 4).

Table 4. Combined scores on knowledge and affect for 1229 respondents.

	Number of doctors[a]	Mean score
Overseas doctors		
Graduated > 10 years:		
No HIV positive patients	111	41.2
HIV positive patients	74	43.7
Graduated ⩽ 10 years:		
No HIV positive patients	82	42.8
HIV positive patients	49	45.1
UK doctors		
Graduated > 10 years:		
No HIV positive patients	204	44.5
HIV positive patients	295	47.2
Graduated ⩽ 10 years:		
No HIV positive patients	158	47.1
HIV positive patients	256	50.0
Overall	1229	46.2[b]

[a]Full information was not available for 32 doctors. [b]Standard deviation 6.4, range 25–66.

Correlation of attitudes with clinical practice

Median scores on the knowledge and affective response sections were chosen as thresholds by which to divide this group of doctors into those with high and low knowledge and those with positive or negative attitudes. The responses of these groups to the questions on clinical practice were examined. Respondents with low scores for knowledge or affective response were significantly ($P<0.01$) more likely than other doctors to:

- be unprepared to counsel patients over the long term;
- always state in a medical report if a patient was HIV positive;
- find difficulty obtaining help for HIV positive patients from other health workers;
- want to be informed of all patients with HIV infection;
- prefer that HIV positive patients should receive all their care at hospital;
- prefer that homosexuals or intravenous drug abusers declare their at-risk status;
- believe that counselling patients' partners was not their responsibility;
- generally advise people at risk to have an HIV test;
- prefer not to register known HIV/AIDS patients.

They were less likely to:

- feel at ease asking HIV positive patients for any information;
- consider that general practitioners should play a vital day-to-day role in HIV/AIDS management;
- consider that HIV/AIDS patients had a right to counselling from them;
- be prepared to manage AIDS patients dying at home, given back-up services:
- be prepared to undertake more counselling given psychiatric back-up.

Discussion

Despite a response rate at the lower end of the acceptable range for this type of survey and below that of other recent reports,[4-6] this study provides information on a large group of general practitioners practising in central and suburban London. Although responders did not differ from non-responders in having a greater involvement with HIV positive patients or in the characteristics of their practice, it is impossible to be certain that the responders are representative of the whole population of London general practitioners. Failure to respond may have been due to overload from other postal surveys on topics in which many general practitioners have no particular research interest,[8] or concern about the confidentiality of their views on AIDS. Several doctors believed that by expressing their views they would be criticized and many are sensitive about their public image with respect to AIDS, perhaps understandably in view of adverse publicity in the medical and popular media.[4,9,10]

More than half of the doctors reported having a patient with HIV infection on their list. In addition, almost three quarters reported recent consultations by considerable numbers of the so-called 'worried well', as HIV infection becomes a new focus for hypochondriacal concerns.

Clearly general practitioners are responding to programmes of postgraduate education which include AIDS. However, attending postgraduate teaching did not appear to reduce their apprehension about dealing with AIDS. Having had contact with HIV positive patients was a much stronger factor in allaying such anxiety. Doctors who were apprehensive were also likely to consider themselves at risk from patients with HIV infection. Although it is known that such risks are extremely small,[11] this point cannot be emphasized enough in teaching. Education of family doctors may need to be more interactive, with the use of workshops and seminars rather than lectures to address these fears which may never be expressed in formal teaching sessions.

Although contrary to current ethical guidelines,[3,12,13] 4% of doctors were testing patients for HIV antibodies without the patients' knowledge or consent, and a few were doing so regularly. Paradoxically, many of these doctors had attended study days where this issue may well have been discussed. However, earlier studies have reported that up to 58% of general practitioners would be prepared to test without patients' knowledge in 'certain circumstances',[6] and that between 30 and 50% are in favour of compulsory screening for the main risk groups.[14] This study has shown that such testing is actually undertaken by only a small minority of doctors.

Most general practitioners felt confident to manage many of the psychosocial problems associated with HIV infection in patients and their partners, and were prepared to do so in the long term. Many are already doing so judging by their reported actions during recent consultations. They were certainly more confident to handle psychosocial problems than physical problems. This result is more optimistic than a report from Oxfordshire in which general practitioners were said to be most likely to refer patients for such support.[5] In addition, they were tolerant of HIV positive patients as well as those in the at-risk groups, with the exception of drug abusers. Despite 'substantial' numbers of opiate misusers approaching general practitioners, it has been reported that doctors have a low tolerance of these patients, and tend to refer them to specialist services.[15-17] Nevertheless, the Royal College of General Practitioners and the General Medical Services Committee have recently concluded that, in spite of the considerable workload, general practitioners should continue to play a key role in coordinating the care of drug abusers.[18]

Most of the respondents wanted to be better informed about HIV patients on their practice lists, either by the patients themselves or by the hospital services. Despite advocates for[3,19,20] and against[10,21] general practitioners having access to this information, there has not generally been any justification for overriding patients' reluctance to their general practitioner being informed. Most general practitioners are aware of fears about confidentiality, but they do not generally believe their own

practice records are insecure. They will need to convince their patients, many of whom cite concern about confidentiality as one of the chief reasons they do not confide in their doctor.[22] Medical records are confidential in a medical rather than legal sense and must be produced if requested by the courts. Reports are often requested by insurance companies and information withheld will arouse suspicion. Although there has been no test case yet, doctors may be held criminally responsible if a sexual partner of an HIV positive patient could have avoided infection through information from the doctor.[23] Thus, despite rigorous attention by doctors and their staff to confidentiality, doctors may still be called upon to divulge information and many patients are aware of this.[22,24]

Contact with HIV positive patients has a positive effect on practitioners' knowledge and tolerance of AIDS. In addition, younger doctors and those graduating in the UK seem to be more positive and knowledgeable than older doctors and those graduating overseas. Boyton and Scambler[6] also found that younger general practitioners were more knowledgeable. Younger doctors, particularly those training in the last four to five years, may have been taught about AIDS both as undergraduates and as postgraduates prior to their entry into general practice. They will also have grown up in an era more tolerant of homosexuality and alternative lifestyles than older doctors. Woman doctors, while more positive towards HIV issues were no more knowledgeable than their male counterparts. Although, as reported elsewhere,[5] attendance at educational meetings on AIDS increased knowledge, it did not make practitioners' attitudes more positive. Overseas doctors were less likely to be knowledgeable or positive in their attitudes, which may reflect differing social mores or medical systems in other countries. These doctors in particular may benefit from appropriate postgraduate education.

Although we can never be certain of the correlation between attitudes and behaviour, it is clear that doctors with less positive attitudes towards, or less understanding of, the psychosocial consequences of HIV infection reflect these views in desiring less clinical involvement with such patients. However, there was little to substantiate claims that family practitioners are hostile to homosexuals[4] or patients with HIV infection.[9] It is also known that when patients do take their general practitioner into their confidence, rejection by the doctor is exceptionally rare.[22] General practitioners need to reassure the public of their willingness to be involved and this has already begun.[3] Many patients are needlessly reluctant to inform their doctor, placing greater strain on sexually transmitted disease clinics which are ill equipped to provide community care.

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Address for correspondence

Dr M.B. King, General Practice Research Unit, Institute of Psychiatry, Denmark Hill, London SE5 8AF.