SHORT REPORT

Incentives for voluntary HIV testing in NHS staff

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Background
HIV seroprevalence is rising in the United Kingdom. While acceptability of HIV testing has been explored among many groups there is a paucity of data regarding voluntary HIV counselling and testing (VCT) among NHS staff.

Aims
To understand the barriers to HIV testing among NHS employees. To observe how these may be overcome. To assess which factors would motivate staff to undergo VCT and which would be a disincentive.

Methods
Completion of a cross-sectional anonymous postal questionnaire survey of new employees at a London district general hospital. Demographic and attitudinal factors were collected. Respondents were able to give multiple responses to questions regarding reasons for and against VCT. Those unable to communicate in English were excluded.

Results
There was a 63% response rate; of 69 respondents, 76% were female, 72% had English as their first language and 30% self-identified as white British. Thirty-nine percent were nurses, 19% doctors and the remainder a variety of professions. Of these, 41% had had a previous HIV test; none were known positive. Sixty-two percent would consider future testing. The commonest reasons to consider testing were knowledge of status (79%), treatment benefit (40%) and to inform family members (44%). The commonest reasons not to test were already tested negative (30%) and rather not know (26%).

Conclusions
Since the NHS is recruiting staff from areas of high HIV prevalence, VCT should be encouraged. NHS staff require information on how to access testing as well as the benefits of early detection of blood-borne viruses.

Key words
Blood-borne viruses; health care workers; HIV; testing; VCT.

Introduction
The debate around testing of immigrants and health care workers (HCWs) for communicable diseases including tuberculosis (TB), HIV and other blood-borne viruses (BBV) continues [1]. The Department of Health (DH) has recognized the issues associated with the potential risk of transmission of BBV from HCWs to patients. In its 2003 document ‘Implementing Getting Ahead of the Curve: action on blood-borne viruses and tuberculosis’ it advises that all new HCWs will require testing for BBV should they be involved with certain invasive procedures or exposure-prone procedures (EPPs) [2]. EPPs are defined as ‘those in which there is a risk that injury to the health careworker could result in exposure of the patient’s open tissues to the blood of the health careworker. Such procedures occur mainly in surgery (including some procedures in minor surgery carried out by GPs), obstetrics & gynaecology, dentistry and midwifery’ [2].

HIV is increasing in incidence in the United Kingdom; most of those infected as a result of heterosexual intercourse were infected overseas. Approximately 82% are recorded as acquiring their infection abroad with 70% acquiring their infection in Africa [3].

The number of HCWs employed by the NHS from areas where HIV is endemic is increasing with many likely to be unaware of their HIV status [4]. In 2003, 42 000 foreign nurses were employed in the United Kingdom, double the number 2 years previously. A small proportion of these will potentially be involved in EPP.

As with other groups, it is important to identify HIV-positive HCWs to prevent onward transmission with regard to EPP, sexually and in terms of mother to child transmission. Furthermore, it would allow restriction of HCW from EPP and achieve early detection of HIV to avoid morbidity and progression to AIDS. Information about factors which would influence staff accepting
voluntary counselling and testing (VCT) might highlight misconceptions that could be challenged or make it possible to provide educational facilities to reinforce positive ideas around HIV testing and dispel negative connotations. In addition, perceiving VCT in a positive light might help staff empathize with patients who are, increasingly, being offered HIV testing in non-traditional environments.

The aims of this study were to assess the acceptability of hypothetical voluntary HIV testing for staff at a London district general hospital and to understand the barriers to HIV testing and how these may be overcome so routine testing is seen as a universal pre-employment test.

Methods

A pilot project was undertaken during February to April 2004, collecting data from existing NHS staff. The study was based on the completion of a voluntary, anonymous questionnaire distributed to new employees, in the occupational health (OH) ‘starter pack’, and returned in pre-addressed envelopes for analysis. Participants were allowed to provide multiple reasons for why they would or would not consider having an HIV test. Those unable to read and communicate in English were excluded by administrative staff distributing the questionnaires. Local ethics committee approval was secured prior to undertaking the study. Rates of previous testing and willingness to consider future testing were analysed using Fisher’s exact test. All statistical analyses were performed in Stata 8.

Results

Sixty-nine staff members completed and returned a questionnaire out of 110 distributed, giving a response rate of 63%. Of the respondents, 76% (52) were female and 72% (48) spoke English as their first language. Twelve percent (18) were of ethnic groups linked to high endemicity areas (four black Caribbean, eight black African). The other 57 staff members were black British (8), white British (21), Asian British (6), Asian (8), black other (2), white other (9) and other (3). Fifty-eight percent (40) staff members (13 doctors and 27 nurses) were from professions considered to be exposure prone (EPP). The other 29 staff consisted of four clerks, seven administrative staff, seven pharmacists, five health care assistants and six other.

All respondents (65) who answered the question on awareness of HIV stated familiarity with the terms ‘HIV/AIDS’ and 41% (27) had had a previous HIV test. None were known to be HIV positive at the time of completing the questionnaire. The reasons for having an HIV test (62%) or not having an HIV test in the future (38%) are shown in Table 1. The most commonly stated barriers to HIV testing, other than already being aware of a negative test, a preference not to know and perception of low risk for HIV, were concerns about losing employment and life assurance. No respondent sited lack of knowledge of HIV as a barrier to testing. Unfortunately, we have no data on time since last negative HIV test or reasons for perceived low risk. There were no significant differences in the reporting of any reasons for testing or not testing between potential EPP and other staff. Those of ethnicity linked to endemic regions were more likely to report not being interested as a reason for not testing (50 versus 0%, \( P = 0.02 \)) and somewhat more likely to report the benefit from treatment as a reason to test (71 versus 33%, \( P = 0.09 \)).

While those from areas of endemic HIV were more likely to have had a previous HIV test (56 versus 39%), this was not significant \( (P = 0.47) \). Willingness to consider future testing was comparable in those from high and lower endemic area groups (58 versus 63%, respectively). The reporting of a previous HIV test was somewhat more common among potential EPP staff than other staff (49 versus 30%) but was not significant \( (P = 0.14) \). The reporting of willingness to consider future testing was similar in the two groups (63 and 62%, respectively). Those who had had a previous HIV test were slightly more likely to report a willingness to test (again) than those who had not had a previous test, 70 versus 59%.

Discussion

Our survey highlighted that awareness of HIV in this particular health care setting was universal, that a significant minority of staff had previously tested for HIV and

Table 1. Reporting of reasons for testing and reasons not to consider testing

<table>
<thead>
<tr>
<th>Reasons for testing ((N = 43))</th>
<th>Reporting, (n) (%)</th>
</tr>
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<tbody>
<tr>
<td>Like to know</td>
<td>34 (79)</td>
</tr>
<tr>
<td>Tell family</td>
<td>19 (44)</td>
</tr>
<tr>
<td>Benefit from treatment</td>
<td>17 (40)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reasons not to consider testing ((N = 23))</th>
<th>Reporting, (n) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know negative status</td>
<td>7 (30)</td>
</tr>
<tr>
<td>Rather not know</td>
<td>6 (26)</td>
</tr>
<tr>
<td>Perceived low risk</td>
<td>4 (17)</td>
</tr>
<tr>
<td>Effect on life assurance</td>
<td>4 (17)</td>
</tr>
<tr>
<td>Job loss</td>
<td>3 (13)</td>
</tr>
<tr>
<td>Effect on family</td>
<td>2 (9)</td>
</tr>
<tr>
<td>Fear of treatment</td>
<td>2 (9)</td>
</tr>
<tr>
<td>Not interested</td>
<td>2 (9)</td>
</tr>
<tr>
<td>Fear of death</td>
<td>1 (4)</td>
</tr>
<tr>
<td>Concerns around confidentiality</td>
<td>1 (4)</td>
</tr>
</tbody>
</table>

*The percent values sum to over 100 as multiple reasons reported.
most would consider a future test. Nevertheless, some barriers to VCT were detected and these must be addressed. Staff involved in EPP are responsible for ensuring that they do not transmit BBV to patients. This group is being encouraged to undergo testing for HIV and hepatitis C (HCV) infection at commencement of employment and should alert their OH department if they feel at risk of having acquired a BBV infection [5–7].

The small numbers involved in our pilot study make drawing firm conclusions difficult, particularly regarding the comparisons of subgroups of staff. Further studies could identify individuals at higher risk through their country of upbringing etc., and those likely to be directly involved in EPP. Interpreting willingness to partake in an actual test may be difficult to extrapolate from responses to a hypothetical testing situation. By ensuring anonymity we had hoped to minimize factors such as social desirability bias [8]. Further research should include those unable to read English, who may have unique views and lower access to accurate information.

Testing opportunities need to be ongoing, reflecting ongoing risk. To reduce staff shortages, the NHS has recruited overseas, targeting countries with significant HIV epidemics such as South Africa [4]. This has a negative impact on that nation’s health care infrastructure and may facilitate importation of HIV into the United Kingdom. The UK government now aims to restrict recruitment from countries with a dearth of HCWs, so the United Kingdom may now see a reduction of immigrant staff from countries with endemic HIV.

The hypothetical prospect of a large number of undiagnosed HIV-positive HCWs would affect the future provision of NHS services, although it would not mirror the situation in many sub-Saharan African health care systems with health service collapse [4,9]. It would also adversely affect struggling UK HIV services. Targeted VCT would be beneficial for NHS employees from highly endemic areas or with other risk factors for HIV infection. However, the only way to ensure equity and normalize HIV testing is by advocating VCT universally. Following the publication of the national strategy on sexually transmitted infections and HIV in England and Wales [10], testing is set to increase and now many specialities routinely offer HIV testing to their patients.

HIV prevalence in those previously tested is low; however, we cannot comment on the prevalence in the 59% not tested. It is encouraging that the majority (62%) would consider testing for HIV in the future. Worryingly, a significant minority would decline HIV testing on the basis of perceived negative factors, e.g. fears of losing employment. Such concerns are open to challenge in the context of modern UK-based practice. The education of HCWs on potential employment restrictions is crucial; such staff can safely work in many areas, outside of EPP practice, without restriction but need be aware that they are at increased risk of acquiring infections such as TB. Clearly, not all clinical staff will be involved in EPP while some ancillary staff such as ambulance technicians may potentially be involved in EPP. The benefits of early HIV diagnosis and treatment options also need to be addressed.

As mandatory HIV testing of HCW has been rejected in a number of settings [11–13], VCT should be offered in a non-threatening and confidential manner. The DH has clear guidelines regarding HIV-positive staff but none on the universal VCT of HCWs [2,6]. This requires addressing in view of continued immigration and public concerns about HIV transmission from staff to patients. Ideally, HIV VCT should be broached during employees’ initial OH assessment, however, information on testing, outside of the remit of OH, should be provided to encourage those with anxiety about confidentiality. This study provides the basis of future research into this important area of health care for NHS employees and its conclusions may be extrapolated to other areas that employ migrant workers.

Conflicts of interest

None declared.

References


