



ETHICO-LEGAL ASPECTS OF THE PROTOCOL FOR NEEDLESTICK INJURIES

The majority of hospitals have a management protocol in place should a health care worker (HCW) sustain an injury while on duty that may put him/her at risk of contracting a blood-borne infection. There are many ethical, legal and practical problems to be considered, and this paper aims to discuss some of the ethico-legal aspects.

Many of the arguments put forward are not new and have been addressed in South Africa many times before^{1,2} but the advent of post-exposure prophylaxis (PEP) calls for these problems to be re-addressed. This article argues that the urgent action that needs to be taken after a needlestick injury is the provision of PEP.

The practical problems involved in drawing up a needlestick policy are numerous and are complicated by consideration of the 'window' period during which time the source patient may test negative for HIV despite having a significant viral load. These problems will not be discussed here.

BACKGROUND

The increasing prevalence of HIV infection has put it at the top of many agendas, but it is one of many diseases that may be contracted through occupational exposure. Although in most developed countries hepatitis is a greater risk, HIV will be the only one considered here.

The incidence of needlestick or other such injuries in the workplace is difficult to quantify owing to under-reporting of such events. At Tygerberg Hospital, there have been 2 245 reported events since 1994, an average of 374 per year.

Although protocols vary from institution to institution in South Africa, there seem to be some common threads that raise persistent ethico-legal problems. Most institutions require that the patient's blood should be taken and be submitted for immediate testing along with the HCW's blood. This policy might lead to an HCW or patient being told in the middle of the night that he/she is HIV-positive, without having had adequate counselling. It may also mean blood being taken from a source patient who has not given personal consent.

THE RIGHTS OF THE PATIENT

A patient should be fully counselled prior to having blood taken for an HIV test for any purpose, but this right may legitimately be waived following an occupational injury. The national policy on testing for HIV released on 10 December 1999 stated that HIV testing may be conducted 'Where an existing blood sample is available, and an emergency situation necessitates testing the source patient's blood (e.g. when a HCW has sustained a risk bearing accident such as a needlestick injury), HIV testing may be undertaken without informed consent but only after informing the source patient that the test will be performed, and providing for the protection of privacy. The information regarding the results may be disclosed to the HCW concerned but must otherwise remain confidential and may only be disclosed with his/her informed consent.'

It is debatable whether the patient benefits from testing in these circumstances, and in that regard the situation is similar to a participant in a research trial. An editorial in the *New England Journal of Medicine*³ discussed many of the dilemmas surrounding research in the developing world. Strict guidelines are being called for. Various groups have explored the degree to which patients are actually informed. Magwaza *et al.*⁴ found that patients recruited for research on a vaginal gel had a poor understanding of the trial and the implications of their participation. Surely the same principles should apply when taking blood for a needlestick injury.

At present there is a growing trend to include a clause on a patient's operation consent form that states that a patient should be willing to have blood taken while under anaesthetic in the event of a needlestick injury to an HCW. Research on patients' comprehension of informed consent⁵ suggests that many patients do not recall details of their operations and diagnoses. It is reasonable to conclude that they are not going to understand the implication of having blood taken from them for an HIV test in the event of occupational exposure.

THE HEALTH CARE WORKER'S PERSPECTIVE

As the HIV pandemic grows, more HCWs will acquire HIV infection as part of a general trend. What implication does that have on their future employment prospects?

Take for example the case of an HIV-positive surgeon. Can he/she continue practising? According to the Labour Relations Act No. 66, 1995, Section 185: 'a dismissal is only fair if it is related to an employee's conduct or capacity or is based on the employer's operational requirements', and 'a dismissal solely because an employee is HIV positive or has AIDS is likely to be found either automatically unfair in accordance with s187 because it is a dismissal based on discriminatory conduct by the employer'.



In the case of a surgeon, will HIV-seropositive status prevent him/her from operating? This is not clear at present. If we look at other countries for guidelines there has been a case of a professor of otolaryngology being allowed to continue practising low-risk surgery in Scotland, but his patients must sign a consent form saying they are aware of his status.⁶ The subject of surgeons and hepatitis C has recently been debated, with Heptonstall⁷ arguing that those testing positive should be transferred to low-risk duties and Cockcroft⁸ arguing against it. If a surgeon is in a permanent position in a state hospital he/she must continue to receive a salary. Many surgeons, however, are in training and planning a private career on completion of their training. How many referrals can a private HIV-positive surgeon expect?

As an HCW, can one's HIV status remain anonymous? Clearly the interests of patients have to be considered. The most recent guidelines from the then South African Medical and Dental Council⁹ state that the doctor who takes blood from another doctor is obliged to inform the latter's employers or be certain the doctor him- or herself has done so.

Taking all this into consideration, is it worth reporting occupational injury if one is a surgeon in training? Doing this obliges the surgeon to know his/her HIV status and to tell his/her employer.

THE EMPLOYER'S PERSPECTIVE

The employer has a duty towards the employee and the patients. The risk to a patient being cared for by an HIV-positive HCW is unknown. There have been a few 'look back' studies, and these revealed no significant risk, although this conclusion has been questioned. There have been a few individual cases reported including that of the HIV-positive Florida dentist some of whose patients seroconverted. There were claims from his patients that the route of transmission was not through established medical contact. Despite lengthy enquiries, the exact route of transmission has not been established.

The Occupational Health and Safety Act No. 85 of 1993 (OHSA) Section 8 (1) requires employers 'as far as it is reasonably practicable to create a safe working environment'. The implications related to HIV/AIDS are that it places a duty on employers to ensure that:

- Steps are taken to assess the risk of occupational HIV infection.
- The risk of possible HIV infection is minimised.
- Universal infection control procedures are used in any situation where there is possible exposure to blood or blood products.¹⁰

The Centers for Disease Control and Prevention¹¹ noted that

PEP is effective in 79% of cases if given within 1 hour of exposure.

The combination of these implies that employers are duty bound to provide an HCW with PEP on the reporting of a needlestick injury.

The policy is an expensive one costing about R100 per starter kit per person and about R1 000 per person for 1 month's treatment. There is evidence¹² that HCWs are not fully compliant with their treatment.

According to the Occupational Injuries and Disease Act No. 130 of 1993 (COIDA), Section 22 (1) of the Act provides for compensation for employees who are injured in the scope of their employment:

'Implication related to HIV/AIDS: Compensation is thus possible in accordance with the Act where an employee becomes HIV infected following an occupational exposure to infected blood or blood products.

'Operational issues for workplace: It will be necessary to show that the occupational accident was the direct cause of the patient seroconverting. This requires consideration of the following issues:

- Whether an accident protocol exists on occupational exposure to blood or body fluids.
- Whether HIV testing is offered to all persons after an occupational accident by the employer; whether procedures are in place to deal with situations where an employee refuses to undergo HIV testing.
- Whether the post-exposure prophylaxis (paid for by the employer) is provided to employees where a serious risk of HIV transmission exists.¹⁰

Clearly the HCW's blood has to be taken around the time of initial exposure.

CONCLUSION

Taking all the above into consideration, several points need to be addressed.

1. In the era of PEP, does a patient's blood need to be taken immediately? If the patient is under anaesthetic it is reasonable to allow the patient to regain consciousness, have proper counselling and then have blood taken. The urgent action that needs to be taken is the provision of PEP.

2. Outside normal working hours, should the HCW have blood taken immediately in the scenario mentioned above? It may have enormous consequences for the HCW to know their HIV status. This should not be a decision that should be expected to be made without adequate counselling and consideration.

It is reasonable therefore to reformulate needlestick policies to allow immediate PEP to be given (within 1 hour) and then to



ascertain the HIV status of the source and the HCW within normal working hours.

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BRANCH MEETINGS AND CPD POINTS

The Gauteng Branch of the Southern African HIV Clinicians Society holds open CME meetings on the fourth Thursday of every month. These meetings, at which southern African HIV/AIDS experts present talks on topical issues relevant to local conditions, are held at the Pharmaceutical Society building in Rosebank.

The meeting dates for 2001 are: 22 February, 22 March, 26 April, 24 May, 28 June, 26 July, 23 August, 27 September, 25 October and 22 November.

Branch meetings are also held in the Western and Eastern Cape and KwaZulu-Natal.

Should you wish to attend any of these meetings please contact the Society's Johannesburg office, tel. (011) 482-2630.

One CPD point per hour can be obtained for attendance at regional Branch Meetings. Speakers receive an extra point per hour (i.e. two points per hour).

THE SOUTHERN AFRICAN JOURNAL OF HIV MEDICINE

The quarterly 2001 issues of the *Southern African Journal of HIV Medicine*, will be distributed by post to members of the Society, medical schools and various state institutions and departments. It is therefore necessary to become a member of the Society in order to receive the journal on an ongoing basis. In order to apply for membership please ring (011) 482-2630 or cell 083 602 6636, or fax (011) 482-2630.

Should you wish to contribute an article, paper, review or letter to the editor, please e-mail your contribution to sahivsoc@gmail.co.za or fax to (011) 453-5559. Articles should not exceed 2 500 words.

Every issue of the *Journal* contains a questionnaire for which CPD points can be earned.

GUIDELINE UPDATE

Readers are reminded that durable, washable laminated Adult Guidelines for Antiretroviral Therapy, suitable for heavy-duty use, e.g. on notice boards, at clinics and for teaching, are available from the Society offices for a small fee. The Paediatric Guidelines will soon be available in this format. Guidelines for the Prevention and Treatment of Opportunistic Infections and on the Prevention of Mother-to-Child Transmission of HIV are in preparation.