

Routine pre-hospital admission HIV testing

There are a number of reports of hospitals testing their patients for HIV without their consent. This practice is both unethical and useless

Bashir Mamdani

HIV testing, unlike any other blood test, can have severe emotional, financial and social consequences. Therefore, the recent practice of several hospitals in Mumbai, of requiring routine pre-admission HIV testing for all patients, is disquieting.

The World Health Organization in 1968 defined the following conditions as being necessary to implement a program of mandatory testing:

- the condition being tested should be an important health problem;
- there should be an accepted treatment for patients who test positive;
- facilities for diagnosis and treatment should be available;
- there should be a recognisable latent or early symptomatic stage;
- there should be a suitable test for examination;
- the test should be acceptable to the population;
- the natural history of the condition, including development from latent to declared disease, should be adequately understood;
- there should be an agreed policy on whom to treat as patients;
- the cost of case-finding (including diagnosis and treatment of patients diagnosed) should be economically balanced in relation to possible expenditure on medical care as a whole; and
- case-finding should be an ongoing process and not a once and for all project. [1]

World opinion on mandatory testing

While many of these conditions are not valid for HIV/AIDS, worldwide,

Dr. Bashir Mamdani, 6/7 Gulmohar Galaxy, Plot #1 04, Viman Nagar, Pune 411 014

opinion about HIV-antibody testing has varied widely. The testing for HIV antibodies without the patient's consent is not new. Physicians in many countries have been asking how long AIDS is going to be considered a special case where physicians are barred from ordering diagnostic tests without the patient's explicit consent. In 1987, The British Medical Association adopted a resolution stating that physicians need not obtain a patient's permission before performing HIV testing. Subsequent criticism of this resolution, and, in particular, suggestions that ordering a test without the patient's explicit consent may lead to legal action, prompted the British Medical Association to seek legal advice. The legal experts' conclusion that this practice would indeed expose the physician to legal liability prompted rescission of the resolution. The subject has been reviewed by legal experts in other countries also with, in general, similar determinations. (2,3,4,5,6,7)

When questioned about their motives in ordering tests for HIV without the patients' prior consent, physicians often cite concerns regarding transmission of HIV infection from the patient to a health care provider. Some feel that they need to know the patients' HIV status in order to protect themselves. Some doctors want to exclude HIV without unnecessarily worrying the patient. Surveys of physician attitudes regarding HIV testing without the patients' prior explicit consent show a broad support for such testing. A survey of physicians in Quebec (8) showed that a third of the respondents supported such testing. Almost three-quarters of doctors in Western Australia felt that it was not always necessary to obtain the patient's

consent.(9)

At the national level, proposals for mandatory screening of the entire population have been considered and rejected in most countries with the exception of Cuba and Mongolia. Most countries, however, have policies requiring mandatory testing of selected sub-populations such as commercial sex workers, prisoners, military recruits, etc. In the United States, many states provide for mandatory testing of patients with unknown HIV-status after an accidental exposure of a health worker to that patient's body fluids.

Scientific rationale for HIV testing

While such policies are based more on political considerations rather than science, it would be worth considering the science behind the politics. The field of HIV testing is a rapidly evolving field. Screening serodiagnostic tests for HIV infection are based on tests that detect antibody to HIV in the serum/plasma. Tests may be based on enzyme-linked immunoassays, agglutinin tests and colloidal gold assays. The newer enzyme-linked immunosorbent assays (ELISA) have a sensitivity of close to 100% and a specificity of 97%. Non-ELISA tests have a lower sensitivity (85-90%) and specificity (65-85%). Current international guidelines require a confirmatory second test such as the Western Blot directed against specific HIV antigens. While the issue of the approach to diagnosis is far from settled, all currently recommended strategies require a two-step process.

The more sensitive immunosorbent assays are typically run in batches, and although the test itself takes only 15-30 minutes, the batching may result in a delay of a few days. The

need for a second confirmatory test means that there may be a delay of 1-2 weeks between the sample being drawn and the results being available. Recently, more rapid test kits have become available that provide results in minutes and require no special equipment. Results, if negative, may be given to the patient immediately. However, a positive result requires confirmation. Several studies from Africa and other countries in the past few years have demonstrated that the sensitivity and specificity of the newer ISA tests is such that combining two or more tests based on ISA may be as accurate as the more expensive and specialised Western Blot or specific immunofluorescent tests.

Even with the accuracy of an ELISA, a proportionately larger number of false positive results may be expected when the incidence of the disease in the target population being studied is low. Assuming a specificity of 99.5 percent and HIV prevalence among the target population of one percent, the positive predictive value of a screening test would be 67 percent — 33 of 100 positive tests would be false positives. With a lower prevalence of 0.1 percent, the predictive value drops to 17 percent, and 83 of 100 positive tests would be false positives.

After the initial exposure, the patient develops a flu-like illness that lasts for five to ten days. HIV testing during this interval remains negative. It typically takes two-three months and may be as long as 18 months or longer before the test for HIV-antibodies turns positive. Tests that measure the virus load would be positive during this interval, signifying that the patient is capable of transmitting the infection.

Unlike in experimental situations, the incidence of laboratory errors would be expected to be higher and the number of false positives and false negatives higher than reported for any specific test when in general use. Thus, mandatory testing of all admissions to a hospital is likely to result in a large number of false

positive individuals who are then unjustly subjected to the pain and trauma of being told, unnecessarily, they are likely to develop AIDS, who will face social ostracism and even lose their jobs. At the same time there may be false negative cases, whether as a result of laboratory error or because they have acquired HIV infection too recently and have not yet developed antibodies that could be detected by the screening tests. Thus, if the intent is to protect hospital workers, the objective may not be satisfied.

Risk-benefit analysis of mandatory testing

While studies have documented health care workers who have acquired HIV infection from accidental exposure to blood and blood products, the risk of acquiring AIDS has been determined to be less than 0.3 percent after accidental exposure, but varies with the severity of the exposure. (10,11) The most effective means to prevent HIV transmission from a patient to a health-care worker is the use of universal precautions (12,13), not the testing of patients. Repeatedly, it has been established that identifying HIV-infected patients will do little if anything to reduce the risk of infection. In fact, the vast majority of cases of occupational exposure and infection have occurred when the health-care worker in question was treating a person for an AIDS-related condition, and the patient's HIV status was already known by the health-care worker. (14)

The value of any mandatory HIV-testing policy depends on what use would be made of the data gathered from such exercise. It is essential to balance the potential harm to the patient against the gain to the society. In most cases, mandatory testing is a quick-fix solution that gives the impression that the authorities are doing something to protect a target population. In case of mandatory pre-admission testing, the institutional

management wants to be perceived as a benign authority always concerned about the safety and well being of the hospital staff. This practice is illusory, expensive (both in terms of costs and harm, psychological, fiscal, social to the patients), discriminatory and therefore, unjustified. In light of the serious consequences of a patient learning that he or she is HIV infected, there is no reason not to insist on informed consent before any blood or other body fluid is taken for testing for the AIDS antibody. Testing must also be likely to result in effective measures to control or interrupt HIV transmission or the consequences of HIV infection. This makes pre- and post-test counseling all the more important. In situations where tests are being carried out as a routine without a consideration of the sexual and drug use habits or history of exposure to blood and blood products in the individual being tested (i.e. low risk groups), counseling, if any, is often perfunctory rather than meaningful and effective.

Physicians bear the responsibility to learn to use the HIV test wisely and must consider the potential harm to the patient when ordering such tests. Adoption of policies at the hospital level can ensure that the importance of obtaining a patient's specific and informed consent to HIV testing is understood. Such policies should explicitly exclude HIV testing from general consent to medical testing, specifying that HIV testing should only be undertaken with the specific informed consent of the person being tested.

An alternative strategy

Hospitals have the moral obligation to protect their workers. In case of AIDS, this is best achieved by adopting universal precautions that include hand washing, use of protective devices such as gloves, masks when dealing with all patients irrespective their HIV status. This will reduce transmission of not only HIV but also of other infectious diseases

such as hepatitis and TB, from patient to patient as much as patient to health care worker and health care worker to patient. Universal precaution policies have been adopted in most countries around the world. Cost analysis carried out in the US (15) came out in favour of universal precautions against mandatory HIV testing of all admissions. Similar studies need to be carried out in India also. A major drawback of universal precautions is that they do not prevent needle-stick injuries, the most common risk for health care workers. Also, compliance with universal precautions varies widely. Some technological solutions are becoming available for the former, while the latter is a matter of education and enforcement.

References :

1. JMG Wilson, G Jungner. Principles and Practice of Screening for Disease. **WHO Public Health Paper, 34**. Geneva: World Health Organization, 1968.
2. RS Magnusson. Specific Consent, Fiduciary Standards and the Use of Human Tissue for Sensitive Diagnostic Tests and in Research. **Journal of Law and Medicine 1995; 2: 206-232**
3. J Hamblin. Health Care: Rights and Responsibilities. **Law Society Journal 1992 (May): 66**
4. WT West. Assault and Battery : Testing for AIDS. **Justice of the Peace 1990, 8 12**
5. J Godwin et al. **Australian HIV/AIDS Legal Guide** (2nd ed). Sydney: Federation Press, 1993, 181- 182
6. A Orr. AIDS: Adapting the Law. New **Law Journal 1988; 138: 388**
7. MS Swartz. AIDS Testing and Informed Consent. **Journal of Health Politics, Policy and Law 1988; 13: 607**
8. RA Paiement. La perception du SIDA par les médecins québécois. **BULLETIN 1990; 30(4): 19.**
9. RS Magnusson. Testing for HIV without Specific Consent: A Short Review. **Australian and New Zealand Journal of Public Health 1996; 20(1): 57-60.**
10. Becker CE, Cone JE, Gerberding J: Occupational infection with human immunodeficiency virus (HIV): risks and risk reduction. **Ann Intern Med 110:653,1989**
11. Henderson DK, Fahey BJ, Willy M, et al: Risk for occupational transmission of human immunodeficiency virus type 1 (HIV-1) associated with clinical exposures: a prospective evaluation. **Ann Intern Med 113:740, 1990**
12. Centers for Disease Control. Recommendations for prevention of HIV transmission in health-care settings. **MMWR 1987; 36 (suppl 2S).**
13. Centers for Disease Control. Update: Universal precautions for prevention of transmission of human immunodeficiency virus, hepatitis B virus, and other **bloodborne** pathogens in health-care settings. **MMWR 1988; 37:377-382,387-88.**
14. W Flanagan. HIV Testing in the Health Care Setting. **Queens Law Journal 1993; 18: 71.**
15. VA Lawrence, A Gafni, K Kroenke Preoperative HIV testing: is it less expensive than universal precautions?! **Clin Epidemiol, 1993; 46(11):1219-27**

Positive life

We are a small group of people who have been associated with the complex consequences of the HIV among our friends and families, our partners and colleagues, and ourselves.

We believe that HIV needs a holistic continuum of care for those living with HIV, as well as the affected. Only information, sustained, sensitive advocacy and access to good health preserving human rights and dignity can begin the process of caring and healing.

You can be part of our efforts in any of the following ways: contact us and contribute by being a part of the family; send us any published material for the resource centre; send us addresses of people we can approach for help, free subscriptions etc; donate anything that this resource centre can use effectively in the form of cash or kind.

Also, you can spread the word that we exist! PLWHAs and the directly affected are not the problem but part

of the solution

For further information on Positive Life, get in touch with Monalisa Mishra / Ramesh Venkataraman, coordinators, Positive Life, D-2 / 2466 Vasant Kunj New Delhi, India. Tel.: 91-1 1-6893751.

E-mail: poslife@nde.vsnl.net.in

(from the internet)

In response to the Supreme Court ruling that a hospital did not violate medical ethics of confidentiality when it informed the would-be spouse of an HIV-positive person of the person's HIV status. (AIDS patients have no right to marry: SC. **The Times of India**. November 17, 1998) Positive Life responds:

A legal sanction against the right of a PLWHA to marry is neither a necessary nor a sufficient condition to stop the spread of the virus.

The appellant ('X'), a medical professional by training, had donated blood for transfusion. The blood was found to test HIV positive. In India blood donors are not told of their HIV status; the blood is simply discarded.

This is government policy. Instead, the hospital decided to pass the information on. And it chose not to inform X, but the woman he was to marry.

The right to privacy is not an absolute right. The concern that marriage between sero-discordant couples may infect an unsuspecting partner is understandable. However, certain points must be made:

- If someone had to be informed, was it not X?
- The judgement refers to the right of a PWA to get married. What if X were not to get married? Unprotected sex does not begin and end with marriage. Does that mean hospitals may routinely inform HIV-positive people's potential sex partners?
- If partners are aware, sero-discordant couples can have risk-free sex, or they may choose not to have sex.

The judgement sets a precedent for the disclosure of a PLWHAs status by anyone, in the name of public good, on the basis of a subjective risk perception.