

staff. Zoltie and Hout, of the Leeds Family Health Services Authority minor surgery inspectorate use 14 criteria to approve a practice for minor surgery, one of which is a follow up policy.⁵ Whether general practitioners think that minor surgery is worth doing must depend not only on the balance of cost and benefits (in which being a fundholder is certainly weighty) but also on the enthusiasm of the practice to provide a complete service for its patients, on the patients' satisfaction with the results, and on the doctors' own ethical sense that they are not taking unreasonable risks with their patients for whatever motive. Pringle *et al* have looked at training for minor surgery, which is still in its infancy, but training in dermatology, potentially more important, has not been addressed at all.⁶ In both disciplines training seems woefully inadequate.

General practitioners will find themselves competing with hospitals offering day surgery, but as patients' main advisers they will usually control whether they do the job themselves or refer it to a day surgeon. Fundholding general practitioners will also decide which accredited histopathology laboratory they should contract with for the specimens they excise. Their choice will depend not only on where they have good relationships with histopathologists but also on the speed of service—although in histopathology speed is usually less important than accuracy. The accreditation of NHS and private laboratories, which, after pilot studies, is now set to go ahead, should reassure general practitioners that the competi-

tion for their histopathological specimens is at least between acceptable services (handbook available from Clinical Pathology Accreditation (UK) Ltd, (a company set up by the Royal College of Pathologists and the main pathology societies), Project Office, Department of Haematology, Children's Hospital, Sheffield S10 2TH).

The minor surgical component of the new general practitioner contract has therefore introduced new twists into the practice of both general practice and histopathology. Their full financial and clinical ramifications may not be entirely what the begetters of the scheme intended.

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Preventing AIDS now

Treating other sexually transmitted diseases could help

At the VIIth international conference on AIDS held in Florence in June this year, James Chin, of the World Health Organisation's global programme on AIDS, outlined sobering figures about the worldwide AIDS pandemic. Over 16 000 cases of AIDS had been reported in Brazil by the end of last year. In Thailand the prime minister's office recently estimated that 400 000 people are already infected with HIV. Thousands of prostitutes in Bombay and Madras are infected, portending a disaster in India. Nowhere is the problem worse than in sub-Saharan Africa, where, Dr Chin estimated, there are currently 5 million to 6 million people infected with HIV with half a million cases of AIDS expected each year over the next decade—even without new HIV infections. Recent figures indicating that the prevalence has plateaued among sentinel populations (for example, blood donors and pregnant women) in some parts of Africa¹ do not signal an end of the epidemic. They indicate only that the number of new infections is roughly equal to the number dropping out of such pools because of illness and death.

About the only good news is that the HIV epidemic in North America and Europe probably peaked—with over one million people infected—in the mid-1980s (PS Rosenberg *et al*, 1991 meeting of the American Statistical Association, Atlanta, 1991).² Because of the long latent period between HIV infection and the development of AIDS numbers of new cases of AIDS will not fall until the mid-1990s. Even this decline will not signal an end to concern about HIV. Those who get sexually transmitted diseases or who use intravenous drugs—the young urban poor being most at risk—will continue to become infected with HIV.

Treatment, vaccines, and prevention are the only ways of controlling this pandemic. But treatments for HIV infection and the associated opportunistic infections are of no practical importance in limiting the spread of HIV, and preventive vaccines will not be available until at least the end of this century. By that time Africa alone may have 15 million to 20 million people infected with HIV, according to Dr Chin. Prevention is therefore the only realistic immediate approach to the control of HIV.

HIV is spread by well defined sexual, parenteral, and vertical routes. Of these, heterosexual spread accounts for more than nine in 10 new infections worldwide. Although modifying sexual behaviour is the most effective approach to prevention, it may also be the most difficult. In many Third World cities, especially in Africa, young men outnumber young women, creating a demand for the services of prostitutes. Single urban women may have few other opportunities for employment. With up to 1000 clients a year these prostitutes are at high risk of exposure to HIV and serve as reservoirs of infection for their partners. But if female to male transmission of HIV occurred in one in 1000 acts of unprotected vaginal intercourse³ the epidemic would not have spread with the astounding speed that has been observed in Africa and other places where homosexuality and intravenous drug misuse are rare.⁴

One important cofactor increasing transmission of HIV may be the presence of sexually transmitted diseases, which are spreading almost unchecked in many groups that are at high risk of sexually acquired infection. The relation between sexually transmitted diseases and transmission of HIV needs

further elucidation,⁵ but one study reported HIV seroconversion among 3% of men who had had single exposures to prostitutes in Nairobi.⁶ The study indicated that this 30-fold increased risk was attributable mainly to sexually transmitted diseases (especially genital ulcerative diseases) in these prostitutes. In women the inflammation associated with sexually transmitted diseases may be asymptomatic and continue for many weeks or become chronic when untreated. A prostitute who had inflammation associated with a sexually transmitted disease for one fifth of the year and 200 partners during this period would thus infect six of them, whereas she would infect perhaps one partner during the four fifths of the year when no inflammation was present.

Condoms are the least expensive approach to controlling sexually transmitted diseases and have the added virtue of providing barrier protection against HIV. Schemes promoting the use of condoms are already under way in most parts of the world, with varying degrees of success. In many countries resistance to using condoms continues—from men (who consider that they reduce sexual pleasure), from their wives or girlfriends (who believe that they encourage promiscuity), and from those offended on religious or cultural grounds. Condoms need promoting, but additional innovative strategies are needed.

Although the record of success in controlling sexually transmitted diseases with antibiotics is not encouraging, attacking the HIV epidemic at this point is at least a possibility. Treatment of sexually transmitted diseases has intrinsic merit in improving personal health, a strong selling point for enlisting cooperation. Clinics and staff, however, cost money. Furthermore, although treatment for simple conditions may not be expensive, treating resistant strains of infecting organisms adds greatly to the cost. In many Third

World countries the annual public sector budget for all health programmes is roughly \$10 per person. Clearly, outside funds will be needed if programmes to control sexually transmitted diseases are to be expanded.

But success will depend not only on money. Scientists must develop practical technologies for diagnosing sexually transmitted diseases rapidly and new drugs for treating such diseases safely, simply, and cheaply. Just as important are new strategies appropriate to local conditions. These include increasing the use of paraprofessionals licensed to diagnose and treat sexually transmitted diseases, schemes to market effective but inexpensive generic antimicrobial agents, and mass campaigns to treat sexually transmitted diseases in high risk people throughout an area. Such approaches will not halt the HIV epidemic, but in a crisis of this size they should not be overlooked.

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AIDS surveillance in Africa

Time to rethink case definitions

Surveillance of the AIDS pandemic in Africa has always posed formidable problems for epidemiologists. Diagnostic accuracy—according to the case definitions for AIDS used in industrialised countries—is impossible to achieve in all but a few places with the right diagnostic facilities. Responding to the urgent need for surveillance, the World Health Organisation drew up a clinical case definition (the WHO/Bangui definition), which depended on clinical criteria without the need for serological verification.^{1,2}

Judged by its use, the WHO/Bangui definition has been successful—52 African countries have reported cases of AIDS using mainly this definition.³ Some countries have modified it to fit local circumstances, removing a defining symptom here, adding the need for an extra sign there, and many now accept or encourage a positive result of an HIV test as supportive evidence. (At least one, Côte d'Ivoire, requires such a result.²)

Inevitably the definition has its limitations, and two papers in this week's journal discuss these at length (p 1185², p 1189⁴). Because of limited laboratory facilities published evaluations of the WHO/Bangui definition have been mainly restricted to groups of sick patients using HIV positivity as the reference standard. The definition's sensitivity and specificity have been calculated as being between 60% and 90%^{2,5}—useful for purposes of surveillance, but leaving uncertainty over

whether this surveillance tool is intended to monitor trends in cases of AIDS or HIV infection. Other problems exist with the WHO/Bangui definition. Because many doctors lack diagnostic facilities they use the definition for diagnosis. The title "clinical case definition" encourages this confusion. The misuse is disturbing as the probability that a patient who fulfils the WHO/Bangui definition tests positive for HIV may fall well below 50% when seroprevalence is low.⁵

Another problem of using the definition is the delayed and incomplete picture that it gives of the spread of infection.⁶ Far preferable for surveillance of infection is the unlinked anonymous testing for HIV of sentinel groups attending health services^{6,7} (such as pregnant women and people with sexually transmitted diseases), which has now begun in several African countries^{8,9} using the same methods as in industrialised countries.¹⁰

Where does this leave the WHO/Bangui definition? De Cock and colleagues rehearse the overwhelming case for AIDS reporting to continue and suggest a thoughtful redesign of the definition, which includes the requirement for a positive HIV test result.³ Insisting on positive test results in all circumstances, however, is impractical: HIV tests are already limited and are likely to become more so as AIDS funding to Africa inevitably falls. As a provisional solution to the