abstained from sex immediately after their diagnosis, for periods ranging from a few months to two years, with a return to sex coinciding with a return of confidence and self esteem and a greater knowledge of the risks involved. Almost all participants observed that the frequency with which they had sex had declined since their diagnosis. Indeed, five men reported that they had not had a sexual relationship since their diagnosis.

We are aware that the self selected nature of our sample may have biased the results obtained. Our study strongly suggests, however, that the sexual practices of many HIV positive homosexual and bisexual men may not correspond to those described by Catchpole and colleagues. Nevertheless, we agree with the authors' contention that their data highlight the need for more effective health education messages, and we have found that this need was also expressed by the patients we surveyed.

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Several reasons exist for failure of health education message

EDITOR,—M A Catchpole and colleagues report the continuing transmission of sexually transmitted diseases among homosexual and bisexual men infected with HIV-1 who were attending genitourinary medicine clinics; this indicated that a quarter of this group was practising unsafe sexual behaviour.¹ Self reported data on sexual behaviour gathered from HIV positive men in our clinic support these findings. Almost two thirds (221) of our sample of 349 reported having anal sex; among 155 men who responded to a question about condom use, 59 reported that they either used condoms inconsistently or never used them for insertive anal intercourse with their regular partners, while 40 said that this was the case for insertive anal intercourse with casual partners. A substantial minority (45 men) perceived the maintenance of safer sex as a problem.

There is now an extensive literature on the factors associated with unsafe sexual behaviour. This shows that accurate information and access to condoms alone are not sufficient to ensure safer sexual practices and that personal and interpersonal variables are important influences.² There is evidence of the effectiveness of cognitive and behavioural interventions to help those who have difficulties in adopting or maintaining safer sex,³ and in our centre we have

introduced a risk reduction service, which translates research evidence into practice and is offered to all people, particularly those who are HIV positive.

We agree with the authors that there has been a failure to deliver an effective health education message to those who are already infected with HIV. The reasons for this include the assumption that all HIV positive people will refrain from unsafe sexual behaviour, fear of further stigmatising those with the infection, and anxieties among health care staff that discussing safer sex with HIV positive people is inappropriate and may deter them from seeking medical care. It is important that, whatever the difficulties, we do not fail to help HIV positive people to protect themselves and others against genital infection and the further transmission of HIV.

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HIV infection must be destigmatised

EDITOR,—M A Catchpole and colleagues report that the current system of voluntary confidential HIV testing in genitourinary medicine clinics in England and Wales is failing to identify a substantial proportion of patients with HIV infection and that many patients who are identified as HIV positive do not adopt or sustain safer sex practices.¹ These findings have major policy implications. Should routine testing for HIV be introduced in genitourinary medicine clinics in England and Wales? Would this help to identify a larger proportion of the population with HIV infection?

Mandatory HIV testing at genitourinary medicine clinics has been carried out in Hungary since 1988 and is considered by Hungarian public health officials to be a highly effective component of the HIV prevention programme.² Whereas only 30% of all HIV tests in Hungary are carried out mandatorily (the rest being voluntary), the National Institute of Hygiene estimates that these tests account for 80% of positive results. Positive results are followed by intensive counselling and contact tracing. Infected people are offered high quality medical treatment, psychosocial support, and welfare assistance when these are needed. Most importantly, perhaps, routine testing for HIV infection seems to be widely accepted in much the same way that screening for syphilis is. Opportunities to object to the testing programme exist but have not been exploited even by the groups most closely affected by the programme.

Conversely, the introduction of routine HIV testing in England and Wales could well trigger a

chain of ultimately counterproductive events. After 15 years of the control of AIDS being based on voluntarism the introduction of routine testing would almost certainly inspire vigorous opposition. At least some people with suspected or confirmed sexually transmitted diseases would avoid going to genitourinary medicine clinics for fear of being tested and identified as HIV positive. These people, with undetected and untreated sexually transmitted diseases, would then be at increased risk of transmitting HIV.

Moreover, Catchpole and colleagues' findings suggest that, even if routine testing were introduced, this would not of itself result in reduced transmission. Informing people that they are HIV positive is no guarantee that they will consistently adopt safer sex practices.^{3 4}

What these findings point to is the urgent need for new approaches that destigmatise HIV infection while providing encouragement to people to accept responsibility for protecting themselves and their partners.

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Sexual behaviour of homosexual men with and without HIV infection differs

EDITOR,—M A Catchpole and colleagues suggest that there has been a failure to deliver effective health education messages to those at highest risk of acquiring HIV infection and those who have already been diagnosed as infected with HIV.¹ This generalisation does not take into account nuances in the behaviour of the two subgroups. Evidence suggests that considerable differences in sexual behaviour exist between homosexual men at high risk and those who are already infected with HIV. Recent data on gonorrhoea from Brighton confirm this behavioural difference.

The number of cases of gonorrhoea in homosexual men attending the department of genitourinary medicine in Brighton fell dramatically from 70 in 1993 to 35 in 1994 and 36 in 1995. Among homosexual men infected with HIV, 13 had gonorrhoea in 1993, seven in 1994, and seven in 1995 (1 in 5 in all three years). In 1995, 24 of 29 men not infected with HIV acquired gonorrhoea through unprotected oral sex under the misconception that the practice is safe. By contrast, five of the seven men with HIV infection acquired the infection through unprotected active and passive anal sex (three rectal and two urethral). The pattern was similar in the previous two years.

Clearly, a substantial majority of homosexual and bisexual men not infected with HIV are well informed of the risks of unprotected anal sex and behave accordingly, although they are misguided, at least as far as other sexually transmitted diseases are concerned, about the safety of unprotected oral sex. By contrast, a substantial number of homosexual men who are infected with HIV seem to ignore safer sexual practice. Education programmes should address this

distinction and specifically target the different perceptions and sexual activity of each group.

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Different diseases indicate different risks of transmission of HIV

EDITOR,—M A Catchpole and colleagues conclude that "substantial numbers of homosexual or bisexual men continue to practise unsafe sex despite being aware of their infection with HIV-1" and suggest that this may result in an increased spread of HIV.¹ We do not believe that they have given sufficient data to support this claim.

They provide a list of sexually transmitted diseases detected in this cohort but fail to supply the relative proportions and frequencies of these diseases. This is relevant as some of the diseases are more indicative than others of high risk behaviour. Scabies and pediculosis, for example, may indicate minimal (if any) sexual contact, while infective syphilis and gonorrhoea are much more likely to indicate close sexual contact. Similarly, some of the sexually transmitted diseases listed are as likely to be transmitted through orogenital contact as through penetrative anal intercourse, but penetrative anal intercourse carries a higher risk of transmission of HIV.² It would have been helpful, therefore, if the authors had also recorded the specific risk of infection.

The authors admit that some of the unsafe sexual practices may occur between partners who are both infected with HIV, but they conclude (with no direct data to support this statement) that such cases are likely to represent a minority. In our experience, a considerable number of HIV positive people state that they practise unsafe sex only with people known to be HIV positive and that they practise safer sex with those who are HIV negative or of unknown status.

Finally, the large proportion of heterosexual men and women with HIV-1 infection who are apparently unaware of their HIV status implies that these groups do not perceive themselves to be at risk of HIV infection. This emphasises the need to broaden policies on HIV testing outside sexually transmitted disease clinics and to encourage discussions about HIV testing in primary care.

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Non-sexual transmission of human papillomavirus

EDITOR,—The editorial on cervical human papillomavirus infection by Jeffrey F Hines and

colleagues¹ failed to address a problem which we have recently encountered and which is probably more widespread than its neglect in the literature would suggest.

On the basis of a cervical biopsy which histologically showed mild koilocytosis only, a patient was advised that she had a wart virus infection of the cervix which must have been acquired sexually. She was in considerable distress as both she and her partner denied sexual infidelity. Subsequent *in situ* hybridisation using probes for human papillomavirus types 6, 11, 16, 18, 31, and 33 proved negative.

We emphasise, firstly, that assessment of mild degrees of koilocytosis in cervical squamous epithelium is subjective. Furthermore, preliminary data suggest that koilocytosis may not be specific for human papillomavirus infection.² Koilocytosis in cervical biopsy specimens should be ascribed to human papillomavirus infection only if additional histological manifestations such as papillomatosis, binucleation, or dyskeratosis are also present (M Wells, personal communication).

Secondly, even if infection has been confirmed by objective methods (such as immunohistochemistry, *in situ* hybridisation, or polymerase chain reaction), the route of transmission will not necessarily have been sexual. Extragenital human papillomavirus infection is common and, as some types of virus can be found in both cutaneous and mucosal lesions,³ digital transfer from other sites in the same individual is a possibility. Furthermore, infection can be acquired vertically from the mother at birth, and the virus has been shown to persist in the infant for at least six weeks.⁴ The presence of anogenital warts in young children in whom sexual abuse has as far as possible been excluded suggests that vertically acquired human papillomavirus infection may persist for years. Persistence into adulthood cannot be ruled out. Thirdly, even if the infection has been acquired sexually it may have been acquired during a previous relationship. Particularly in older women, infection can persist for several months if not years in a subclinical or latent state,⁵ and current histological or cytological abnormalities may reflect infection acquired years earlier.

These uncertainties should be borne in mind when counselling patients about cervical cytology or biopsy findings. Health professionals would be well advised to be cautious in raising doubts over the sexual fidelity of a patient or partner, particularly if a diagnosis of human papillomavirus infection has been based solely on the finding of koilocytosis in a cervical smear or biopsy specimen.

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Managing HIV disease without Delta

EDITOR,—The editorial by Anthony J Pinching gives further news of the two large randomised placebo controlled trials of combination antiretroviral therapy in advanced HIV infection. Although the apparent beneficial results have been widely publicised, neither Delta nor ACTG175 have yet been published. Are physicians therefore able to make an informed decision on the best treatment for advanced HIV infection? Peer review and debate are vital in the assessment of new data, particularly when the therapeutic and financial implications are so great. The letter columns of the *BMJ* after the premature release of data detailing the risks of venous thrombosis in women receiving the contraceptive pill bear testament to this.

Pinching writes of "evidence based medicine in health commissioning." Surely both providers and purchasers of health care are not yet in a position to consider such combination therapy with so much missing information. Vital data are as yet unknown with regard to patient selection, randomisation, drop out rates, and the level of unacceptable side effects associated with combination therapy and its applicability to the diverse groups affected by HIV infection. Should the *BMJ* not take a more conservative, sceptical approach to these unpublished data and wait impatiently with everyone else for their appearance in a peer review journal?

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Junior doctors should get "additional duty miles"

EDITOR,—Who cares about junior doctors' hours? It is our shoes we should be worried about. Concerned about our lack of exercise since qualifying but puzzled by our weight loss, we undertook a recent study which showed that, as two senior house officers in general medicine, we walked 6.8 miles (10.9 km) while on call for 24 hours. Using recently acquired electronic pedometers, we recorded the mileage from 0900 to 0900, over a total of seven periods on call.

Should hospital planners and administrators give more thought to the location of various wards and departments of each specialty? In our hospital there are four medical wards, two upstairs and two at ground level, at opposite ends of the hospital. The accident and emergency department is in between, and the coronary care unit is along another long corridor upstairs. Furthermore, the pathology and radiology departments, which we often visit while on call, are distant from all the medical wards. Two on call rooms are next to the coronary care unit, but the third is out of the main hospital building, on the other side of a car park.

We think that, in addition to campaigning over the new deal, juniors should be campaigning for a substantial shoe allowance or, indeed, for "crown shoes."

We thank Dr A G Chappell for his encouragement and financial contribution to our cobbler's bill.

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