Box 1 **Reasons given for not using barrier contraception**
'I'm married'
'I trust my partner'
'Long term partner and on the depo'
'Girlfriend is on the pill and we are both clean'
'Just came out of long term relationship'
'Not used them since last visit to GUM clinic'
'Drunk'
'Because I took silly risks'
'I use condoms with casual partners but not my girlfriend'

Box 2 **Explanations for disagreeing with or being unsure about vaccination**
'I would want my kids to learn to be safe and use protection'
'I'm unsure as to effects of vaccination'
'I think it should be up to the child'
'Can't vaccinate everything (eg HIV). If one had a vaccine they may think it's ok to have unprotected sex'
'Unsure as to whether it would encourage or discourage children to think about sex constructively'
'Difficult one'

Among primary care workers, 65% (11) of those questioned were willing to discuss HPV vaccination with both parents and children, with a further 18% (14 in total) prepared to talk to parents but not children. This group identified the same limiting factors as the teachers, again with no objections on religious grounds.

Concerns raised by teachers and health-care professionals included insufficient knowledge about long-term efficacy of vaccination and a potential reduction in precautions taken to prevent STIs.

All participants were asked what they felt was the best way to prevent STIs. Sexual health education emphasizing the use of barrier methods of contraception was considered most effective, but 60% (27) of patients, 71% (12) of primary care workers and 78% (10) of teachers recommended the addition of vaccination strategies to education programmes.

Our results indicate that while knowledge about the vaccines among health-care professionals appears good, the other groups we surveyed are poorly informed, despite recent media coverage. This situation must be further assessed, as we have demonstrated that explanation about the risks of HPV infection and the benefits of immunization can potentially result in high levels of vaccine uptake. We found little opposition to the inclusion of non-oncogenic strains of HPV in vaccines among any of our study groups. Attitudes towards vaccination among patients previously diagnosed with an STI did not differ significantly to those of individuals with no history of infection.

Education of parents, children and the public at large is paramount to achieving a successful vaccination programme, and this responsibility rests with a multidisciplinary workforce, consisting of doctors, nurses and health visitors, those working for sexual health promotion organizations and teachers, with the support of the government and the media.

This study was an extension of an undergraduate assignment completed for the School of Medical Education, University of Liverpool, UK

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Facilitating lymphogranuloma venereum surveillance with the use of real time polymerase chain reaction

In their article, *Lymphogranuloma venereum: an emerging cause of proctitis in men who have sex with men*, Richardson and Goldmeier[1] discuss the recent increase in reporting of lymphogranuloma venereum (LGV) in Europe and the USA. Starting in 2002, a series of epidemics were reported in Western Europe, Canada and San Francisco among men who have sex with men (MSM).[2–5] Though LGV is known to be endemic in parts of Africa, Asia and the Caribbean,[6–8] very little is known about the global epidemiology of the disease. As the authors comment, the lack of data is largely due to difficulties in differentiating LGV from other forms of genital ulcer disease. However, newly developed molecular methods allow rapid and facile differentiation of L1–L3 *Chlamydia trachomatis* serotypes, known to cause LGV. Considering the recent resurgence of LGV as a known cause of severe proctitis among the gay male population and its unique treatment requirements, there is a need for more widespread surveillance of LGV among those at high risk for sexually transmitted infections.

We tested 86 previously collected urogenital specimens, known to be *C. trachomatis*-positive. The samples were originally collected from Peruvian sites of the National Institute of Mental Health Collaborative HIV/STD Prevention Trial.[9] Study target population included those at high risk for sexually transmitted diseases residing in urban, coastal, low-income settings. All specimens were subject to nucleic acid extraction by an automated method. We used a recently described realtime polymerase chain reaction (PCR) assay for the specific detection of L1–L3 serovars of *C. trachomatis*.[10] This assay uses realtime PCR to identify

the presence of a unique gap in the polymorphic membrane protein (*pmpH* gene) in the L-type serovars. The assay requires about two hours from sample processing to completion, and is capable of testing approximately 30 specimens simultaneously.

Out of 86 specimens tested, none (0.0%, 95% confidence interval [CI] 0.0-4.2%) showed presence of the L-type serovars of *C. trachomatis*. There are a handful of potential causes for our null finding. The two most likely causes are the absence of LGV and the use of urogenital specimens. Though there has been a case report of urethritis associated with LGV serotypes,[11] large surveillance trials in Europe have not found LGV among chlamydia-positive urogenital specimens.[12] Unfortunately, rectal specimens were not collected as part of this study. However, an important finding of our study is that surveillance for LGV by molecular methods is a feasible exercise in settings where realtime PCR is available. The addition of this technique, applied to known chlamydia-positive rectal specimens, could vastly enhance LGV surveillance.

Better estimates of LGV prevalence in Latin America and elsewhere in the developing world are crucial for the public health response to the disease. Such information is indicated to identify risk factors, classify high-risk populations and direct proper treatment of proctitis. Historically, LGV surveillance has relied on genotypic sequencing, an expensive and timely enterprise.[13–15] However, the use of molecular methods to help differentiate between chlamydia serotypes makes such estimates possible in a wider range of settings and should be incorporated into surveillance programmes.

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The metabolic syndrome in HIV-seropositive patients

Sir: The article by Palacios *et al.*[1] stresses the important issue of the metabolic syndrome in HIV-seropositive patients. This syndrome is characterized by insulin resistance, dyslipidaemia, central fat accumulation and hypertension.

While they mention several potential causative factors, it is disappointing that the authors have seemingly ignored another association that may be causal. Hypogonadism has long been known to occur in both men and women with HIV disease.[2,3] There is now good evidence to suggest that testosterone is an important regulator of insulin sensitivity in men. Observational studies have shown that testosterone levels are low in men with diabetes, visceral obesity, insulin resistance, coronary artery disease and metabolic syndrome. Indeed some authors have suggested that hypogonadism can be an early marker for the development of the metabolic syndrome.

This has always been thought to be due to aromatization of testosterone in peripheral adipose tissue. However, this dogma must be questioned in the light of recent short-term observational studies,[4] which have shown that testosterone