Challenges to the control of an anachronistic disease

A cluster of papers in this month’s Bulletin describes the facets of maternal and congenital syphilis and lists the current barriers to effective control and treatment. Bidia Deperthes et al. (pp. 410–416) describe antenatal syphilis control programmes in Bolivia, Kenya and South Africa, and outline ways to improve the effectiveness of these programmes. Sarah Hawkes et al. (pp. 417–423) take a broader view of the reasons for which it has proved so difficult to implement and sustain antenatal syphilis control programmes, and propose a multilateral approach, with more inclusive stakeholder involvement.

Stuart Berman describes the pathophysiology of fetal infection, and sets out the current controversies surrounding the timing, nature and dose of medications for maternal treatment. Rosanna Peeling et al. (pp. 439–446) reiterate the limitations of currently available methods of serological screening, and emphasize the need to develop a rapid, non-invasive test to distinguish between present and past infections. Saiqa Mullick et al. comment on the possibility of improving the detection and treatment of congenital syphilis by collaboration with programmes that aim to prevent maternal transmission of HIV, a suggestion echoed in a related editorial by Walker & Walker (p. 401).

Preventing congenital syphilis is simple (pp. 402-409)

The tools to detect and prevent congenital syphilis have been available for decades, yet the infection causes approximately half a million fetal deaths a year. George Schmid argues that a robust control strategy depends on women worldwide having access to adequate antenatal care. Such care must be accessed early in pregnancy, to permit timely testing, treatment, and follow-up, to ensure that incidental re-infection does not resubject the fetus to the risk of congenitally-acquired infection. Recommendations for international, national, local and patient-centred interventions are listed; their implementation stands as a challenge to the global public health community.

Prevention and control of congenital syphilis (pp. 424–430)

Despite having national policies on antenatal testing for syphilis, many countries screen for this condition only sporadically, largely because the programmes involved are not properly organized and the associated costs are perceived to be too high. The disease therefore remains undetected and untreated in many pregnant women, with adverse consequences both for them and infants born to them. In fact, antenatal syphilis screening and treatment programmes are as cost effective as many other public health programmes, such as measles immunization. Congenital syphilis is, however, more difficult to diagnose because more than 50% of infected infants are asymptomatic and the newer diagnostic tests are largely unavailable in the settings where they are most needed. This paper by Saloojee et al. offers recommendations for treating infants with congenital syphilis and at the same time argues the case for moving prevention and control measures for congenital syphilis higher up the priority list for countries’ attention.

A dangerous synergy: genital herpes and HIV (pp. 447–453)

Many studies have shown that herpes simplex virus 2 facilitates the acquisition and transmission of HIV. Connie Celum et al. review the recent literature on diagnosis, treatment, and management of co-infections, as well as the evidence for preventing HSV-2 infection as a strategy for reducing individual susceptibility to subsequent HIV infection. Despite strong evidence supporting such a strategy, the lack of a vaccine for HSV-2, combined with the expense of available symptomatic treatment, complicate control strategies for the two epidemics in the developing world. However, two new trials are recruiting participants in Africa, India and Peru. These trials are designed to test the efficacy of acyclovir in preventing HSV-2 acquisition in people with HSV-2 infections.

Efficacy of condoms against sexually transmitted infections (pp. 454–461)

It has been established that condoms effectively prevent HIV transmission between women and men, and reduce the risk of men acquiring gonorrhoea. King Holmes et al. review recent prospective studies providing evidence that condoms also prevent transmission of other sexually transmitted infections. These studies show that the risk of acquiring chlamydia, gonorrhoea, herpes simplex virus infection, and syphilis, in both men and women is significantly reduced by consistent condom use. The authors discuss the limitations of such condom effectiveness studies, suggest ways to improve future studies, and discuss the effectiveness of current condom promotion programmes.

The clinical course of HIV/AIDS in Africa (pp. 462–469)

Thirty million people are infected with HIV in Africa, but few studies describe the natural history of the disease in this setting. Shabbar Jaffar et al. review existing surveillance data and find only one study reporting survival times after seroconversion. This study showed that in Uganda survival (median, 9.8 years) depended on age at seroconversion, which with a median of 9.8 years, was comparable to survival times reported from developed countries early in the epidemic, before the widespread availability of highly active antiretroviral therapy. Data from hospital-based studies elsewhere in Africa have shown that a high burden of tuberculosis and pneumococcal infections were contributing factors to early deaths. However, there is no evidence that seropositive individuals in Africa suffer a faster progression to death than did seropositive individuals in developed countries before the introduction of antiretroviral therapy. ■