

Prevention of congenital syphilis — time for action

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While congenital syphilis is largely under control in affluent parts of the world, syphilis during pregnancy continues to be a tragic and substantial problem in many developing countries. Estimates indicate that around a million pregnancies are affected annually (1). The situation in sub-Saharan Africa remains the worst, with rates of syphilis infection among pregnant women over 10% and reinfection during pregnancy a common occurrence (2). Yet, as the articles in this issue of the *Bulletin* emphasize, inadequate attention has been given to this significant public health problem in spite of the fact that, as Schmidt states (pp. 402–409), “we have had the tools to prevent [congenital syphilis] for decades” and they are “inexpensive, simple and highly cost-effective”.

Studies in Africa have shown that, if special efforts are made, the traditional approach of antenatal screening and treatment of infected women represents value for money and is at least as cost-effective as antiretroviral therapies to prevent mother-to-child transmission of human immunodeficiency virus (HIV) (1, 3). Schmidt argues, however, that the inability to control congenital syphilis is principally due to “international and national underappreciation of the burden of congenital syphilis, with resultant insufficient political will to prevent and maintain effective antenatal screening programmes”. Hawkes et al. (pp. 417–423) highlight the need to view syphilis control through the perspectives of multiple stakeholders in order to identify opportunities for improving the formulation and implementation of national policies. Thus, political will and commitment among health policy-makers to recognize and tackle congenital syphilis is crucial but, in general, screening and treatment are poorly implemented in many countries (4). Accordingly, several of the papers published in this issue of the *Bulletin* highlight the need to strengthen the traditional approach to control congenital

syphilis. As Deperthes et al. (410–416) discuss, to be successful it is necessary, for instance, to promote early attendance of pregnant women, to decentralize blood testing to the clinic and to promote presumptive treatment of the women’s sexual partners.

While it might seem that antenatal screening and treatment is simple, in reality in many developing countries it is far from that. It depends on a series of interrelated tasks has to be carried out sequentially and each successive task depends on the previous one being undertaken correctly. Fortunately, there have been some exciting new developments, which should facilitate the control of congenital syphilis. In particular, recent technological advances have resulted in improved syphilis serodiagnostic tools, and these are presented by Peeling & Ye (pp. 439–446).

Yet, if control of congenital syphilis is to be achieved, there is a need to consider alternative strategies such as targeted mass epidemiological treatment of pregnant women, particularly as an initial approach in high-prevalence areas. Mass antibiotic treatment of all people aged 15–49 years in one area of Uganda resulted, at follow-up, in significantly reduced prevalence of syphilis (5). A similar approach of targeted mass treatment for syphilis has been advocated elsewhere as a non-routine initial intervention in certain circumstances (6). Indeed, it is fortunate that penicillin continues to be effective in treating syphilis among pregnant women, although there is some uncertainty about the most appropriate schedule (7) and, as Berman (pp. 433–438) notes, “regardless of the penicillin regimen used, efforts to prevent severe fetal involvement and death must focus on treating pregnant women with syphilis sufficiently early in pregnancy”. A similar situation applies with the treatment of congenital syphilis in neonates, see Saloojee et al. (pp. 424–430).

In order to understand better the complex interrelationships between various components of alternative interventions to control congenital syphilis, applied health economic analyses — and in particular economic evaluation — should play an influential role. The use of epidemiological and economic models could help indicate the relative cost-effectiveness of new diagnostic techniques or treatment regimens, and of mass treatment of pregnant women versus more targeted programmes; more generally, such models could reveal which of the programme modifications listed in several of the articles in this issue of the *Bulletin* are most crucial and would have the greatest pay-off.

It is hoped that the articles published here indicate a reawakening of concern about the continuing scourge of congenital syphilis. The challenge will be to follow this concern with well-thought-out renewed efforts and new approaches such as those suggested above. It would be encouraging to see some of the substantial resources that have been mobilized to confront the HIV pandemic used to pursue new initiatives to control congenital syphilis. This is particularly pertinent at this time because infectious syphilis probably increases the transmissibility of HIV and susceptibility to HIV infection. There is an urgent need for international health agencies such as WHO and the Global Fund to Fight AIDS, Tuberculosis and Malaria to mount a concerted effort to tackle the control of syphilis and specifically the prevention of congenital syphilis. ■

References

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