



# Control of Sexually Transmitted Infections



More than 300 million new cases of curable sexually transmitted infection (STI) occur each year, with a global distribution much like that of HIV. Each new infection not only increases HIV transmission risk but also carries the potential of other serious complications, including fetal loss, stillbirth, infertility, ectopic pregnancy and severe congenital infections. Syphilis alone, when present during pregnancy, results in fetal loss in a third of cases, and half the surviving infants suffer congenital disability.

There are a few large-scale interventions that demonstrate the potential impact of STI control on HIV transmission. In less than five years, Thailand reduced the incidence of curable STI by more than 80 percent through a comprehensive effort that included both improved STI treatment and targeted promotion of condom use in commercial sex establishments (100 percent condom policy). HIV prevalence, which had been increasing rapidly, began to fall during this period. Through sustained application of these interventions, Thailand stabilized HIV transmission early and averted a far more extensive epidemic.

There is also evidence that more limited STI interventions can reduce HIV transmission. In rural Mwanza, Tanzania, improving the case management of STI through the syndromic approach in clinics reduced the incidence of new HIV infection by 40 percent. In contrast, the mass antibiotic treatment of the sexually active population at nine-month intervals in Rakai, Uganda, neither reduced most curable STI nor lowered the rate of HIV transmission. We attribute these differences mainly to the stage of the epidemic and the underlying prevalence of curable STI and high-risk behavior in the population.

Experience in STI control programming teaches us that reducing high rates of STI requires a comprehensive strategy of both prevention and management. This includes such well-known aspects of STI control as ensuring effective diagnosis and treatment, encouraging treatment adherence and partner treatment and avoiding re-infection. But it is equally important to pay attention to who uses existing clinical services and who does not. Even the most technologically advanced services will have little impact on STI prevalence if there is poor access to those services. One of the greatest challenges in STI control is making sure that effective services reach the people most frequently exposed to infection and who have the most frequent opportunities to pass on infection to others.

The most effective components of STI control for reducing STI prevalence include:

- Communication strategies to promote services, improve symptom awareness and STI treatment-seeking behavior, and promote and provide adequate supplies of condoms.
- Efficient, effective STI management in clinics accessible and acceptable to the majority of the population, including services for adolescents and young adults. The goal is to maximize the proportion of such encounters that are effectively managed (no “missed opportunities”) while avoiding costly over-treatment in settings with low STI prevalence. Local priorities must determine the appropriate balance between sensitive approaches for identifying infection and avoiding over-treatment, still a central issue in STI control.
- Interventions targeted at populations with the greatest risk of acquiring and transmitting STI. Outreach and peer education among high transmission networks are the foundations of targeted interventions. Preventive and curative services for individuals in these networks go hand-in-hand. Individuals are more receptive to condom use and other prevention messages when they are delivered with quality, non-judgmental curative services (“prevention-care synergy”).
- Improved STI management in important informal sector outlets (e.g., pharmacies where many people, especially male bridging groups, seek treatment).
- Screening or presumptive treatment of the most important core and bridging groups as short-term measures to reduce STI prevalence.

- Selective implementation of more focused disease control measures designed to rapidly reduce the prevalence of specific STI and/or their complications may include the elimination of congenital syphilis, enhanced control of genital ulcer disease or the elimination of infectious adult syphilis or chancroid.
- Improved reliability and relevance of surveillance and evaluation data, including laboratory data to guide control efforts and measure progress.
- Addressing structural changes to modify underlying conditions that facilitate STI transmission. Examples include providing family housing for migrant workers to reduce the demand for commercial sex, and promoting “safe house” rules in brothels where the pressure to use condoms comes from the management rather than individual sex workers.

STI case management is an important, but not the only, component of STI control. The syndromic approach endorsed by WHO/UNAIDS has become the standard of care in many countries for managing the most common STI syndromes. By directing treatment against the common causes of easily identified syndromes, primary health care workers can achieve high cure rates without the delay and cost incurred with laboratory workups. Syndrome algorithms also reduce treatment failures and re-infection by stressing the importance of treatment adherence, condom use and partner treatment. Syndromic management is most effective and cost-effective for syndromes such as urethral discharge and genital ulcer disease, although in many countries herpes is becoming the most common cause of genital ulcers. The approaches now used to manage vaginal discharge syndromes in women are less accurate; better combinations of syndromic and laboratory diagnosis and screening are needed. For now, more sensitive and costly approaches can be adapted for populations with relatively high prevalence and exposure, while treating the more common vaginal pathogens may be more cost-effective in lower-risk populations. As simpler, more affordable and accurate diagnostics become available, STI case management guidelines recommending combinations of syndromic and laboratory diagnostic methods will become feasible under field conditions.



FHI East Timor  
HIV/AIDS Support Project  
Pantai Kelapa Rd, Dili



T (670) 723 0600  
F (670) 331 2836