

WHO guidelines for HIV/STI prevention and care among MSM and transgender people: implications for policy and practice

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For the WHO guideline working group

Rates of sexually transmitted infections (STIs) in men who have sex with men (MSM) peaked in the late 1980s in the developed world and then declined and resurged in the late 1990s.^{1–3} Several high-income countries responded to those rises in STI rates by enhancing surveillance, expanding community-based treatment services and increasing STI screening programmes.^{1–4} Although the response has been varied, for the most part, there has not been a similar public health movement around STI control in low-income and middle-income countries. Legal policies in some countries directed against same-sex behaviour discourage safer sex and sexual health promotion among MSM and transgender people.⁵ Additionally, MSM and transgender people experience profound barriers to quality healthcare due to discrimination and ignorance regarding non-traditional gender identity within the medical community.⁵ Furthermore, while the literature on the epidemiology of same-sex behaviour and prevalence of STIs in low-income and middle-income countries is scant, evidence suggests that MSM and transgender people have a relatively higher burden of STIs than non-MSM or transgender people.^{5–6}

A recent meta-analysis found that MSM in low-income and middle-income countries were 19.3 times more likely to be HIV-infected than the general population.⁶ Reports show varied but generally higher prevalence of HIV infection among MSM as compared with non-MSM with some of the highest odds of HIV infection among MSM in Bolivia (178.8), Mexico (109.0) and Egypt (108.9).⁶ Thus, there is an urgent need for improved HIV prevention

strategies in low-income and middle-income countries. The early diagnosis and treatment of STIs that may potentiate the spread of HIV infection is one such strategy, particularly in light of the fact that most rectal STIs are asymptomatic and are strongly associated with increased risk for the acquisition of HIV infection.

In 2011, WHO published 21 recommendations for the prevention of HIV infection and other STIs designed for use by regional and country partners in resource-limited settings working specifically with MSM and transgender people.⁷ We review and comment on the recommendations for bacterial STI screening in MSM and transgender male to female people, specifically, for the bacterial STIs—*Treponema pallidum*, *Neisseria gonorrhoeae* (NG) and *Chlamydia trachomatis* (CT). Unlike for prevention interventions like condom use or vaccination, there are relatively little data to support asymptomatic testing (ie, screening) and treatment of STIs as a means of

STI control. For a full summary of the guidelines, see the complete WHO publication (http://whqlibdoc.who.int/publications/2011/9789241501750_eng.pdf).

To create the new recommendations, the WHO Department of HIV/AIDS, under the oversight of the WHO Guideline Review Committee and in collaboration with the Department of Reproductive Health and Research, the United Nations Development Programme and the Joint United Nations Programme on HIV/AIDS, used the Grading of Recommendations Assessment, Development and Evaluation (GRADE) framework.^{7–8} As determined by the GRADE approach, the quality of evidence for each topic was scored as high, moderate, low or very low.⁸ These scores were determined by study characteristics, consistency of results, directness of evidence, precision and any reporting bias.⁸ For each topic, the quality of evidence, balance of benefits and harm, community values and preferences and resources required for implementation were all considered, and recommendations were created.⁸

A summary of the recommendations for bacterial STI, strength of the recommendation and quality of evidence is given in box 1.

While there is a clear need to promote sexual health for all people, the lack of strong evidence demonstrating that the routine screening and treatment of STIs reduce community STI prevalence might delay guideline implementation.

Box 1 Recommendations for bacterial sexually transmitted infections, including strength of recommendation and quality of evidence from 'Prevention and treatment of HIV and other sexually transmitted infections among men who have sex with men and transgender people. Recommendations for a Public Health Approach,' WHO, 2011

Recommendation (strength of recommendation/quality of evidence)

- ▶ Offering periodic testing for asymptomatic urethral *Neisseria gonorrhoeae* (NG) infections using nucleic acid amplification testing is suggested over not offering such testing for men who have sex with men (MSM) and transgender people. (Conditional/Low)
- ▶ Offering periodic testing for asymptomatic rectal NG infections using nucleic acid amplification testing is suggested over not offering such testing for MSM and transgender people. (Conditional/Low)
- ▶ Offering periodic testing for asymptomatic urethral *Chlamydia trachomatis* (CT) infections using nucleic acid amplification testing is suggested over not offering such testing for MSM and transgender people. (Conditional/Low)
- ▶ Offering periodic testing for asymptomatic rectal CT infections using nucleic acid amplification testing is suggested over not offering such testing for MSM and transgender people. (Conditional/Low)
- ▶ Offering periodic serological testing for asymptomatic syphilis infection to MSM and transgender people is strongly recommended over not offering such screening. (Strong/Moderate)

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Furthermore, evidence documenting the clinical benefits of the early diagnosis and treatment of asymptomatic gonococcal and chlamydial rectal infection in men is also lacking. Thus, while the screening tests are highly accurate and treatment is highly efficacious, the measurable benefit of asymptomatic case identification and treatment in the control of these infections at the population level remains unknown. The lack of population-level effectiveness or clinical outcome data for screening and treatment of asymptomatic rectal and other STIs in MSM and transgender persons makes it difficult to demonstrate the cost-effectiveness. One recent study using HIV infection as an outcome, however, suggested that screening and treatment for rectal CT and NG in MSM may be a cost-effective means of HIV prevention.⁹

As a source of information about specific community values, the committee relied on data from 20 key informant interviews collected by The Global Forum on MSM and HIV. Those informants, who represented 17 countries predominantly located in the global south, suggested that MSM and transgender individuals want comprehensive health services, including STI screening.⁵

Additionally, there were few research studies from low-income and middle-income countries and a paucity of studies among transgender people. Furthermore, there were few prior test performance studies validating nucleic acid amplification testing for screening of NG and CT infection, and serologic studies screening for syphilis using MSM or transgender people as the referent populations. Despite these limitations, at the final consensus meeting in the guideline preparation process it was concluded that laboratory results from these assays would aid in the early diagnosis and treatment of asymptomatic bacterial STIs among MSM and transgender people. Given the potential resource barriers, however, that recommendation was stated as conditional.

Regardless of these knowledge gaps and questions, evidence supports the fact that MSM and transgender individuals not only contend with legal, political and social discrimination, but also a high burden of STIs, some of which are curable.⁵

To implement the guidelines and continue evaluation, WHO sets forth a five-part plan for optimal guideline uptake, including (1) advocacy, (2) regional promotion and planning, (3) technical assistance, (4) strengthening STI surveillance and (5) research. Through advocacy aimed at increasing guideline awareness among international, regional and

national partners, WHO hopes to emphasise the principles of human rights in healthcare settings and promotes the adoption of evidence-based medical practice.⁷ Next, WHO suggests dissemination through its regional offices and the convening of regional workshops and supports national plans with the intent of linking global recommendations with regional practices, including assessing barriers to the implementation of the guidelines. WHO, as mentioned previously, has also made technical assistance part of the implementation strategy. By generating mentoring networks, country assessments and briefings of regional WHO staff and consultants, WHO hopes to ensure an educated and accountable task force of individuals who can support implementation of the guidelines.¹⁰ It should be noted that these suggestions create a permissive foundation that allows for member countries to implement the guidelines in a variety of ways based on resources, political climate and infrastructure constraints in a country-dependent manner. Lastly, as mentioned earlier, monitoring, evaluation and further research are also of great importance, and thus the WHO has stated its commitment to support operational research to generate evidence on best practice implementation strategies, as well as assist country partners in assessing and measuring guideline adherence.

Regarding other logistical considerations, although nucleic acid amplification testing requires laboratory capacity, it is simpler than culture and may be performed by technicians with less training.⁷ On the issue of feasibility of nucleic acid amplification testing, equipment and supplies must be purchased and are more expensive than culture methods. Increasingly, nucleic acid amplification testing is available in an increasing number of resource-limited countries for the clinical monitoring of HIV infection and the molecular diagnosis of tuberculosis and rifampicin drug resistance.⁷ The same diagnostic platforms may be used for molecular diagnosis of chlamydial and gonococcal infections.

With new historic guidelines, WHO not only acknowledges the existence of two important marginalised groups, but also calls for humane, patient-centred, respectful medical care for people regardless of their sexual orientation, identity or their country's economic status.

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