

THE PREVALENCE OF BACTERIAL SEXUALLY TRANSMITTED INFECTIONS IN INCARCERATED POPULATIONS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background:

Sexually transmitted and blood-borne infections (STBBIs) are common among people in prison, a population recognized by the World Health Organization as critical to the global STBBI response. As recent estimates are lacking, we aimed to determine the global prevalence of bacterial sexually transmitted infections (bSTIs; chlamydia, gonorrhea, and syphilis) among people in prison.

Methods:

A global systematic review and random-effects meta-analysis were conducted by searching online databases and grey literature to identify unique articles published from January 2000 to June 2023 without language restrictions. Studies evaluating the prevalence of bSTIs in incarcerated populations were included. Two independent reviewers screened eligible full texts. Disagreements were resolved by a third reviewer. Analyses were aggregated separately for each bSTI, by age (i.e. adults and adolescents [≤ 19 years]), and sex (i.e. male and female). Potential sources of heterogeneity were examined by meta-regression and subgroup analyses.

Results:

A total of 2,627 unique articles were identified, 274 were eligible for full-text review, and 195 studies were included (1,318,590 individuals; 441,545 [34%] females, 766,753 [58%] males, and 110,292 [8.4%] unknown). Among eligible studies, 91% were conducted in high- or upper-middle income countries. The mean age was 33.5 years (SD = 9.7) among adults and 15.6 years (SD = 1.1) among adolescents. The prevalence of chlamydia, gonorrhea, and syphilis was 6.5% (95% CI 5.0%-8.5%), 1.7% (1.0%-3.0%), and 6.2% (4.3%-8.9%), respectively, among female adults, versus 4.5% (3.5%-5.8%), 0.6% (0.2%-1.4%), and 3.3% (1.7%-6.2%) among male adults. Among adolescents, the prevalence of chlamydia, gonorrhea, and syphilis was 16.9% (14.0%-20.2%), 6.0% (4.5%-7.9%), and 1.9% (0.1%-26.4%), respectively, among females vs. 7.4% (6.3%-8.8%), 2.0% (1.4%-2.7%), and 1.8% (0.5%-6.5%), among males.

Conclusion:

High bSTI prevalence among incarcerated individuals, particularly adolescents, underscores significant public health concerns and unmet needs. Enhanced testing and treatment for bSTIs both within and beyond carceral settings is imperative to address these disparities globally.

Disclosure of Interest Statement:

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