Impact of Expanded Screening on the Detection of HIV and Syphilis in Wuxi, China

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Introduction

HIV and syphilis share similar routes of transmission. In 2010 China adopted expanded HIV and syphilis screening strategy (EHSS) across the country in order to timely detect people with these two infections. The impact of this strategy has not been well documented.

Methods

HIV and syphilis surveillance data 2004-2014 in Wuxi, China were retrieved. Sources of surveillance data included general hospitals (GHs), sexual health clinics (SHCs), blood donation centers (BDCs), voluntary counseling and testing clinics (VCTs) and others in Wuxi. We used Poisson distribution events test to compare number of HIV and syphilis testing, Chi-squared test to compare HIV and syphilis positive rates and proportions of source of HIV and syphilis notification, between the period before EHSS (Period I, 2004-2009) and the period after EHSS (Period II, 2010-2014).

Results

In Periods I and II, 586,000 vs 1,423,000 person-times were screened for both HIV and syphilis (P<0.001); HIV positive rates were 0.08% (476) vs 0.13% (1,854) (<0.001); syphilis positive rates were 0.37% (2,172) vs 0.63% (8,955) (P<0.001). Comparing Periods II to I, Higher proportion of HIV diagnoses were made at GHs, BDCs and VCTs, and lower proportions of HIV diagnoses were made at SHCs; higher proportion of syphilis diagnoses were made at SHCs and BDCs, and lower proportions of syphilis diagnoses were made at GHs.

Conclusions

Both the number of testing for and the positive rate of HIV and syphilis increased as a result of EHSS. HIV-related service capacity building should be enhanced in GHs while that related to syphilis in SHCs.

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