MODELING THE IMPACT OF A SUPERVISED CONSUMPTION SITE ON HIV AND HCV TRANSMISSION AMONG PEOPLE WHO INJECT DRUGS IN 3 CALIFORNIA COUNTIES

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Background:
Supervised consumption sites (SCS) have been shown to reduce receptive syringe sharing among PWID in the U.S. and elsewhere, which can reduce HIV and hepatitis C virus (HCV) transmission. However, in 2022, California Governor Newsom vetoed a bill to pilot SCS in California. This study aims to determine the potential impact of SCS implementation on HIV and HCV incidence among PWID in 3 California counties.

Methods:
A dynamic HIV and HCV joint transmission model among PWID (sexual and injecting transmission of HIV, injecting transmission of HCV) was calibrated to epidemiological data for San Francisco County, Los Angeles County, and San Diego County. The model incorporated HIV and HCV disease stages and adhering to HIV and HCV treatment. Based on U.S. data, we assumed access to SCS reduced receptive syringe sharing by a relative risk of 0.17 (95% CI: 0.04-1.03). This model examined scaling-up SCS coverage from 0% to 20% of the PWID population within the respective counties and assessed impact on incidence after 10 years.

Results:
By increasing SCS from 0% to 20% coverage among PWID, over 10 years this could prevent 22% (95% CI: 10%-32%) of new HIV infections and 28% (95% CI: 13%-34%) of new HCV infections in San Francisco County, 15% (95% CI: 4%-24%) of new HIV infections and 32% (95% CI: 18%-40%) of new HCV infections in Los Angeles County, and 14% (95% CI: 5%-20%) of new HIV infections and 27% (95% CI: 14%-34%) of new HCV infections in San Diego County.

Conclusion:
SCS could be an important intervention to enable HCV elimination and ending the HIV epidemic among PWID in California, and have additional benefits on skin and soft tissue infections and fatal overdose.

Disclosure of Interest Statement:
The conference collaborators recognize the considerable contribution that industry partners make to professional and research activities. We also recognize the need for transparency of disclosure of potential conflicts of interest by acknowledging these relationships in publications and presentations.
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