Title: PrEP Eligibility and HIV Risk Perception for Women across the Criminal Justice Continuum in Connecticut

Abstract

Pre-exposure prophylaxis (PrEP) is critical for women involved in criminal justice (WICJ), a population disproportionately impacted by HIV, though data lacks to inform PrEP implementation. We surveyed 173 WICJ to compare PrEP attitudes, acceptability and barriers across the criminal justice continuum in Connecticut. Compared to WICJ under community supervision (n=125), women incarcerated in closed settings (n=48) more often: experienced intimate partner violence (64.6% vs. 40.0%; p=0.004), had sexual (60.4% vs. 34.4%; p=0.002) and injection risk behaviors (29.2% vs.15.2%; p=0.036), were PrEP eligible (72.9% vs. 40.8%; p<0.001), underestimated their HIV risk (52.1% vs. 34.4%; p=0.001) and were willing to take PrEP (93.8% vs. 77.6%; p=0.014). Findings demonstrate high potential for PrEP in WICJ, though implementation efforts will need to realign HIV risk perceptions.

Purpose or Problem to be addressed

In 2014, 1.2 million women were actively involved in the criminal justice system (CJS), of whom 222,061 were incarcerated in closed settings; the remainder were under community supervision including probation and parole. Women involved in criminal justice systems (WICJ) are disproportionately impacted by poverty, lack of education, unstable housing, physical/sexual abuse and substance use compared to both women in the community and men involved in the CJS. In the context of dire economic need and intimate partner violence exposure, WICJ more often engage in transactional sex or survival sex, condomless sex, and risky injection behaviors and also experience high rates of sexually transmitted infections placing WICJ at disproportionate risk for HIV. Consequently, incarcerated women are nine times more likely to be infected with HIV than women in the community.

The CJS represents an opportunity to address HIV prevention in this high-risk population with otherwise limited healthcare access. HIV prevention efforts for WICJ usually focus on routine HIV testing, provision of opioid-agonist therapy and behavioral interventions for safe sex and injection practices. Pre-exposure prophylaxis (PrEP) is a highly effective and well tolerated tool for HIV prevention, but uptake has been limited among women in general, and nearly zero among WICJ. However, PrEP maintains significant potential for public health impact in WICJ because it is fully user-controlled.

Data is lacking to inform PrEP implementation among WICJ. This study aimed to identify the ideal timepoint and potential barriers and facilitators to PrEP implementation along the criminal justice (CJ) continuum. We aimed to identify differences in PrEP attitudes, awareness and eligibility across the CJ continuum. We hypothesized that WICJ entering closed settings would experience higher HIV risk behaviors than WICJ in the community and attitudes towards PrEP would be similar among WICJ, regardless of CJ involvement.

Description of Intervention or Innovation

This is, to our knowledge, the first survey on PrEP among WICJ across the CJ continuum. We surveyed 125 WICJ under community supervision in 2016-17 and 48 WICJ incarcerated in closed facilities in 2017-18. WICJ in the community were recruited from probation/ parole offices, community outreach programs, transitional housing and drug treatment programs in a mid-sized city in Connecticut. Incarcerated WICJ were recruited from the only CJ facility in the state for all pre-trial and sentenced women.

Women were included if they were ≥18 years old, self-identified as a woman, self-reported HIV-negative status, recently involved in CJ (either on probation, parole, pre-trial supervision or released from prison/jail in the past two months or currently incarcerated) and able to provide written informed consent. The Yale University IRB and research advisory boards at the APT Foundation, Inc, Judicial Branch Court Support Services Division and Connecticut Department of Correction approved study procedures.

Surveys were privately conducted by a trained research assistant using a Qualtrics program on a tablet or
paper. The survey included demographic information (age, race, ethnicity, education, housing status, comorbidities), lifetime CJ involvement, healthcare utilization, recent or pre-incarceration sexual/injection risk, assessment of personal/partner HIV/STI risk and PrEP awareness, receptiveness and potential barriers.

Responses from incarcerated WICJ and those under community supervision were compared using chi-squared and student’s t-test for categorical and continuous variables, respectively. Intimate partner violence was calculated as any physical/sexual violence or isolation from friends/family by partner in past 6 months or ever. PrEP eligibility was calculated via sexual risk in the past 6 months (two or more partners with sometimes/never condom use or any exchange sex or any STI or sometimes/no condom use with an HIV+/HIV-status unknown partner) and injection risk (injection in the past 6 months with shared equipment or injection by another person). We categorized discordant risk perception as women who are PrEP eligible who reported they did not think they were at risk of HIV. A multivariate logistic regression was used to identify independent correlates of PrEP eligibility and HIV risk misperception. All analyses were completed using SPSS (IBM, V24.0).

Summary or Conclusion

We offer a compelling argument for PrEP implementation as a component of HIV prevention for WICJ. We demonstrate high rates of HIV risk and PrEP eligibility (nearly 50%), as well as a willingness in over 80% of WICJ to embrace PrEP as a personal HIV prevention strategy. Notably, we found that nearly 40% of WICJ believed they were not at risk of HIV despite PrEP eligibility. The discordant risk perceptions of WICJ emphasize the need for HIV education across the CJ continuum.

By sampling both WICJ in the community and incarcerated WICJ, we elucidated key differences between the overlapping populations at different points along the CJ continuum. Importantly for HIV prevention programs, HIV risk behaviors seemed to peak directly prior to incarceration with nearly three-quarters of the incarcerated women qualified for PrEP in the six months prior to incarceration. Additionally, incarcerated women in our study reported a higher interest in taking PrEP if eligible (nearly 95%) and were more aware of their HIV risk than WICJ in the community. Our findings speak to the importance of using incarceration as a HIV prevention and education opportunity and argue that minimally, CJ facilities can be leveraged to increase PrEP awareness and ideally, CJ facilities can link women to PrEP service during their return to communities.