

BACKGROUND

- Globally, criminal legal system (CLS)-involved individuals are disproportionately affected by HCV and HIV
- An estimated 18.6% to 82.0% of individuals in carceral settings worldwide have HCV¹
- Recent incarceration has been associated with a 62% increase in HCV acquisition¹
- This is due to criminalization of substance use and limited access to testing, treatment, and harm reduction in prisons and the community¹⁻²
- In 2022, the prison population in Kenya was over 58,000 with an incarceration rate of 107 per 100,000 individuals³

OBJECTIVES

- Understand baseline HCV and HIV prevalence among CLS-involved people who inject drugs (PWID) in Kenya
- Identify risk factors associated with HCV and HIV prevalence among CLS-involved PWID in Kenya

METHODS

- We are recruiting 3,500 PWID from needle and syringe programs (NSP) sites in Kenya via respondent driven sampling
- At baseline, participants complete biobehavioral surveys, and receive HCV, HIV, and HBV testing
- Individuals testing HCV and/or HIV-antibody positive complete a follow-up biobehavioral survey and blood draw at Months 4, 8, and 12
- We conducted this analysis using chi-square tests for categorical variables and t-tests for continuous variables



Image 1: Entrance to Shimo La Tewa Prison in Mombasa

RESULTS

- Of the 1526 participants enrolled thus far:
- Most participants are male (89.9%) and 34.4 years old (SD=±8.6) on average
- Nearly half report ever been incarcerated (n=697, 45.7%) with an average of 2.6 (±1.6) lifetime incarcerations and 10.4 (±14.4) lifetime months
- Additional sociodemographic details are available in Table 1
- CLS-involvement was significantly associated with HCV and HIV infection, and high-risk injection behaviors
- Other factors associated with CLS-involvement are highlighted in Table 2

Table 1. Sociodemographic and clinical characteristics

Characteristic	N (%)
Age *	34.4 ± [8.6]
Male	1372 (89.9%)
HCV positive	314 (20.6%)
HBV positive	21 (1.4%)
HIV positive	179 (11.7%)
Ever incarcerated	697 (45.7%)
Number of times detained in a detention center, jail, or prison for more than 24 hours?*	2.6 ± [1.6]
Number of months detained in a detention center, jail, or prison for more than 24 hours*	10.4 ± [14.4]
Spent one or more nights in jail or prison in the last 6 months (n=697)	65 (9.3%)
Number of times in last 6 months*	1.1 ± [0.5]
Ever used drugs/injected drugs in prison or jail	148 (21.2%)
Used drugs/inject drugs during last incarceration	131 (88.5%)
Years injecting*	6.3 ± [5.8]
Number of injections in last 30 days*	56.1 ± [40.1]
Injected in the last 30 days	1197 (78.4%)

* mean, ± [SD]

Table 2. Factors associated with CLS-involvement

	Ever incarcerated (n=697, 45.6%)	Never incarcerated (n=827, 54.2%)	p-value
HCV-positive	166 (23.8%)	148 (17.9%)	0.004
HIV-positive	103 (14.8%)	75 (9.1%)	<0.001
Years injecting*	7.0 ± [5.9]	5.6 ± [5.6]	<0.001
Injected in the last 30 days	590 (84.6%)	606 (73.3%)	<0.001
Number of injections in last 30 days*	64.9 ± [40.5]	48.7 ± [38.2]	<0.001
Used needles previously used by someone else at last injection	105 (15.1%)	45 (5.4%)	<0.001

* mean, ± [SD]



Image 2: Methadone clinic onsite at Shimo La Tewa Prison in Mombasa

CONCLUSIONS

- HCV and HIV prevalence are significantly higher among CLS-involved PWID in Kenya than those without a history of CLS involvement
- This may be attributed to higher risk behaviors in prisons and the community
- Our findings highlight the need for increased testing, treatment, harm reduction among CLS-involved PWID both in prisons and after return to the community

DISCLOSURES

MJA reports grants through National Institute on Drug Abuse (DP2DA053730, R00DA043011), National Institute on Minority Health and Health Disparities (R01MD016744), and institutionally from the National Institutes of Allergy and Infectious Diseases Centers for AIDS Research (P30AI124414).

ACKNOWLEDGEMENTS

This research was supported by the National Institute On Drug Abuse of the National Institutes of Health under Award Number 1DP2DA053730. We thank the staff and participants from the partnering NSPs, without their assistance and participation this study could not have been conducted.

REFERENCES

1. Stone J., et al. Incarceration history and risk of HIV and hepatitis C virus acquisition among people who inject drugs: a systematic review and meta-analysis. *Lancet Infect Dis.* 2018 Dec;18(12):1397-1409
2. Busschots, D., et al. Hepatitis C prevalence in incarcerated settings between 2013–2021: a systematic review and meta-analysis. *BMC Public Health* 2022; 22, 2159
3. World Prison Brief. Available at: <https://www.prisonstudies.org/country/kenya>