

LEVERAGING HIV TESTING INFRASTRUCTURE TO PROVIDE VIRAL HEPATITIS SCREENING IN KENYAN PRISONS: A CROSS-SECTIONAL STUDY

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Background: Criminal legal system-involved individuals (CLSI) are at increased risk for bloodborne infections (BBIs) compared to the general population. Despite this, prevalence and risk factors are largely underexplored, particularly in low- and middle-income countries (LMICs). We sought to determine the prevalence of BBIs in three carceral facilities in Kenya.

Methods: We built upon existing HIV screening program infrastructure to offer HIV, hepatitis C (HCV), and hepatitis B (HBV) testing at Kodiaga in Kisumu, Nairobi Remand (NR), and Shimo La Tewa (SLT) in Mombasa. Participants completed a biobehavioural survey before linking to clinical care.

Results: We enrolled 1676 individuals in Kodiaga, 1514 in NR, and 1316 in SLT.

HIV prevalence was highest in Kodiaga (17%, 284/1676), compared to 4.9% (74/1514) in NR and 6.7% (85/1275) in SLT. Kodiaga also had the highest HCV prevalence; 2.9% (50/1676) compared to 0.66% (10/1514) in NR and 0.69% (5/1313) in SLT. HBV prevalence was 14.9% (249/1676) in Kodiaga, 10.2% (155/1514) in NR, and 2.3% (30/1316) in SLT.

Few participants reported risk behaviors. Only 1.4%, 1.7%, and 2.7% reported ever injecting drugs in Kodiaga, NR, and SLT, respectively. In Kodiaga, 8.5% reported any sexual intercourse in the year before incarceration, with an average of 1.2 ($\pm$ 2.0) partners. 88.1% reported sex with 3.5 ($\pm$ 9.8) partners in NR and 77.7% with 3.2 ($\pm$ 5.4) partners in SLT.

On average, participants had been incarcerated of 1.2 ($\pm$ 2.4) times in Kodiaga, 3.1 ($\pm$ 6.8) in NR, and 3.2 ($\pm$ 25.1) in SLT for a lifetime total of 20.3 ($\pm$ 41.6), 10.3 ($\pm$ 17.5), 43.5 ($\pm$ 62.9) months, respectively).

Conclusion: We anticipate these data will inform BBI elimination strategies among CLSI in Kenya and potentially other LMICs. Differences between the facilities also indicate that targeted approaches within individual prisons or regions may be more effective than a one-size-fits-all approach.

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