

ENHANCING ACCESS TO HEPATITIS C SCREENING, TESTING, AND TREATMENT AMONG KEY POPULATIONS IN JOHANNESBURG: INSIGHTS FROM A PROSPECTIVE OBSERVATIONAL STUDY

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The prevalence of Hepatitis C Virus (HCV) infection poses a significant public health challenge, particularly among key populations (KPs) in Johannesburg, South Africa. These include people who inject drugs (PWID), people who use drugs (PWUD), men who have sex with men (MSM), and sex workers (SW). Despite their vulnerability, access to HCV screening, testing, and treatment services remains limited.

This prospective observational study evaluated the effectiveness of Hepatitis C Virus Self-Testing (HCVST) for diagnosing HCV among KPs, focusing on PWID and PWUD. The study sought to understand the operational feasibility and acceptance of HCVST among these groups, particularly when integrated with existing HIV services.

Method

From May 2023 to August 2024, the study was conducted in Johannesburg, South Africa, targeting key populations such as people who inject drugs (PWID), people who use drugs (PWUD), men who have sex with men (MSM), and sex workers (SW). Participants presenting at HIV service sites were offered HCV self-tests, which were available in two formats: oral-based and blood-based tests.

If participants tested positive using the antibody self-test, they were offered confirmatory polymerase chain reaction (PCR) testing to verify the diagnosis. The study also aimed to provide treatment initiation services for those confirmed positive through PCR. The overall aim was to increase access to screening, testing, and treatment for HCV among vulnerable populations and to evaluate the operational feasibility of HCVST in these communities.

Results

A total of 1,567 participants administered the self-test on themselves, of these, 97.5% had never previously been tested for Hepatitis C, highlighting the significant gap in HCV testing among key populations. Among those screened, 998 participants (63.7%) tested positive for HCV antibodies through the self-tests. Subsequent confirmatory PCR testing revealed that 854 participants (54,5%) were indeed HCV positive.

Recommendations

The findings of the study underscore the necessity for more innovative approaches to healthcare delivery tailored to the needs of key populations like PWID and PWUD. To improve access to and uptake of HCV screening, testing, and treatment, community-based outreach models should be strengthened.

These models can help overcome barriers related to clinic-based care, particularly by bringing services directly to where the target populations reside or congregate. In addition, integrating HCVST more comprehensively into existing HIV services could significantly enhance the reach of HCV testing efforts, helping to diagnose and treat more individuals within key populations.

Finally, ongoing collaboration between public health agencies, community organizations, and healthcare providers will be crucial in developing sustainable and inclusive treatment programs that effectively combat the HCV epidemic among vulnerable populations.

Table 1: Study population demographics

TOTAL	N=1567
SEX	
Female	270, (17.2%)
Male	1285, (82%)
Transgender men	4, (0.25%)
Transgender women	3, (0.2%)
Other	5 <i>,</i> (0.3%)
POPULATION TYPE	
PWID	1208, (77.1%)
PWUD	160, (10.2%)
MSM	56, (3.6%)
SW	143, (9.1%)
EDUCATION LEVEL	
≤Grade 7 primary schooling leve	44, (2.8%)
≥Grade 8 primary schooling to High	
School	1354, (86.4%)
≥Post High School Institution, University and beyond	169, (10.8%)
SELF-TEST RESULT (TRAINED OBSERVER)	
Positive	998, (63.7%)
Negative	568, 36.2%
SELF-TEST TYPE	
Oral	689 <i>,</i> (44.0%)
Blood	878, (56%)

However, despite the high rates of positive diagnosis, only 37 individuals (4.3%) were initiated on treatment at the time of reporting, and of these, 28 had completed their treatment regimen. The study uncovered a significant barrier to treatment uptake, with many participants reluctant to access clinic-based care. Instead, they expressed a preference for healthcare services to be delivered directly to their locations, reflecting a need for more flexible and accessible service delivery models.

One of the main challenges encountered in initiating Direct-Acting Antiviral (DAA) treatment was the reliance on centralized initiation processes, which created delays and barriers to timely treatment. This issue was further exacerbated by the limited availability of clinical resources, including a shortage of personnel capable of administering treatment. Moreover, treatment completion rates were found to be heavily dependent on the level of psychosocial support provided to the patients.

Additionally, whether or not a patient was enrolled in an Opioid Substitution Therapy (OST) program significantly influenced their likelihood of completing the treatment regimen. These factors highlight the importance of a comprehensive, patient-centered approach that addresses both medical and social needs to improve treatment outcomes.

Conclusion

The study highlights the urgent need for tailored, PWID and PWUD-friendly screening and treatment services. Implementing innovative, community-based healthcare delivery strategies is essential to improve access to critical HCV interventions and treatment among KPs. Ensuring inclusive healthcare approaches will be key to addressing the ongoing Hepatitis C epidemic in Johannesburg.

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