

SEROPREVALENCE AND RISK FACTORS OF EXPOSURE TO SARS-CoV-2 AMONG PEOPLE WHO USE DRUGS IN TEHRAN, IRAN

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Background:

PWUD and people experiencing other health risks are vulnerable to COVID-19. The aim of this study was to establish a longitudinal cohort of PWUD, incorporating evaluation of SARS-CoV-2 seroprevalence and risk factors.

Methods:

This is an open longitudinal cohort study, with enrolment through homelessness shelters, community-based drop-in centers, a public OAT clinic, and mobile outreach units at six sites/locations across 3 Tehran districts. Every three months between December 2020 and December 2021, all adults (≥ 18 years old) attending study sites are invited to participate. Enrollment assessments include on-site venipuncture sampling for SARS-CoV-2 IgG antibody testing and rapid hepatitis C and HIV antibody testing. Logistic regression was used to evaluate factors associated with SARS-CoV-2 seropositivity.

Results:

During December 2020-February 2021, 263 people were enrolled. Median age was 44 years (IQR 37-51), 78% were male, scrap collection was the main source of income among 32%, 72% were homeless, 58% were ever incarcerated, and 93% had a history of drug use. Among those with a history of drug use ($n=245$), 78% had used drugs in the month before enrollment, 20% had ever injected drugs, and 37% were currently on OAT. SARS-CoV-2, hepatitis C, and HIV seroprevalence were 20%, 18%, and 2%, respectively. In adjusted analysis, SARS-CoV-2 was associated with female sex (aOR 3.37, 95% CI 1.35-8.39), older age (≥ 44 years, aOR 2.42, 95% CI 1.20-4.85), and current OAT (aOR 3.66, 95% CI 1.34-10.04).

Conclusion:

SARS-CoV-2 seroprevalence was higher among PWUD, compared with the estimated 17.5% among the general population of Tehran. Sex work among women, increased susceptibility to transmission among older adults, and older people on OAT (median 46 years vs 42 among those not on OAT) likely accounted for higher seroprevalence. Greater involvement of vulnerable communities in health services and information is needed to protect their health during the pandemic.

Disclosure of Interest Statement:

None of the authors had any conflict of interest to disclose in relation to this study.