

THE BRAZILIAN SYNDEMICS OF CRACK USE, HIV AND HCV

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Background: While people who inject drugs are the most in risk population, in Brazil, crack cocaine is one of the most prevalent drug used, and some studies have found HCV is its paraphernalia. Its association with social inequity, can noticeably enhance the prevalence of HIV and HCV. In this study, we investigate the associated risk factors to the syndemics and propose risk patterns to future interventions.

Methods: We analyze data from the Brazilian Crack Survey, a national population-based survey that used time-location sampling methods to recruit crack users from open drug scenes from all Brazilian states, between 2011 and 2013. Individuals were tested for HIV and HCV. We perform a multinomial logistic regression to estimate the association between risk factors and each syndemics category.

Results: The prevalence of HIV and HCV among crack users are 3.3% and 1.9%, respectively. The full syndemics is found in 16 subjects (0.2%). The study analyzes several social-economic topics, behaviors as well as variables related to health conditions. Being a woman (OR 4.0; 90%CI: 1.9-8.7), sleeping on the streets (OR 1.7; 90%CI: 1.0-2.9) and more intense use of crack (OR 2.1; 90%CI: 1.0-4.1), all increase the risk of HIV but not of HCV. Sharing paraphernalia is a strong risk factor for HCV (OR 4.8; 90%CI: 1.7-13.9), not for HIV. The conditions that increase both risks are: exchange sex for money or drugs (HIV: OR 2.4; 90%CI: 1.2-4.7 and HCV: OR 3.0; 90%CI: 1.3-6.9); and history of sexual violence (HIV-OR 2.1; 90%CI: 1.0-4.2 and HCV-OR 3.8; 90%CI: 1.6-9.2).

Conclusion: Syndemics of substance use and infectious diseases vary according to population groups. By focusing on the marginalized crack users population, peculiar risk factors arise. Those could hardly be unveiled in broader studies, where the vulnerable population comprises only a small number of cases.

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