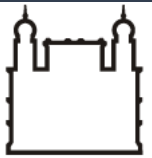


# THE BRAZILIAN SYNDEMICS OF CRACK USE, HIV AND HCV



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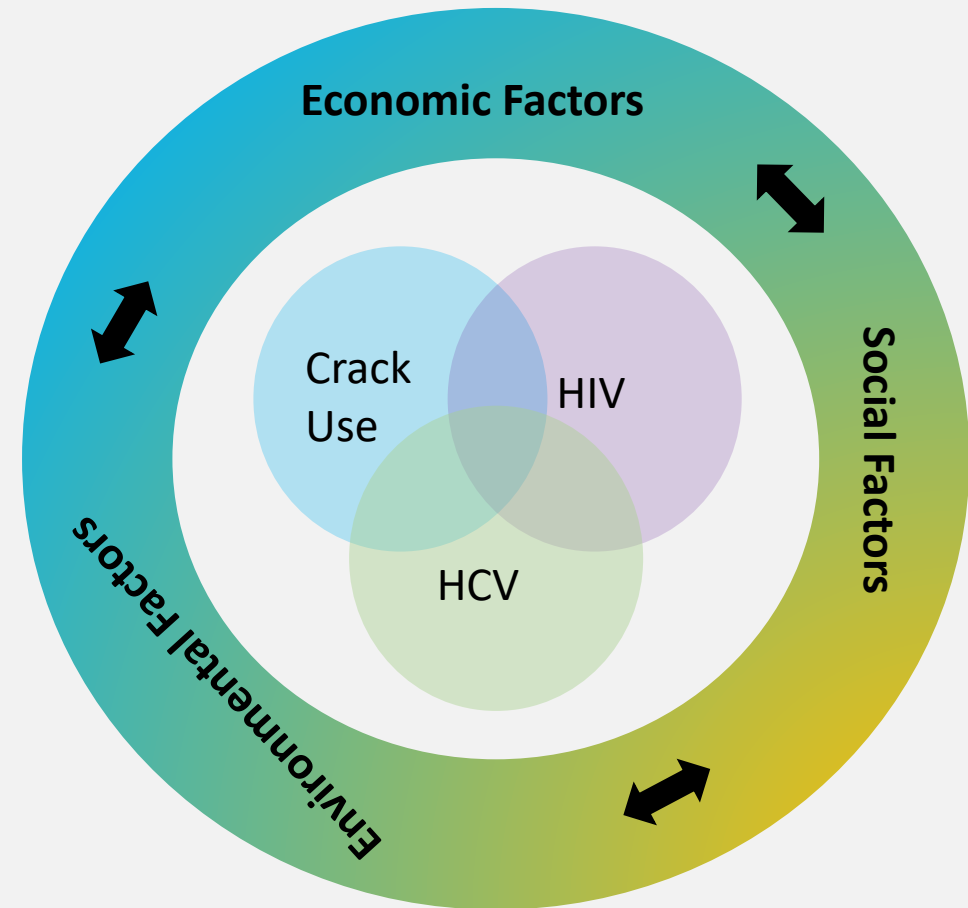
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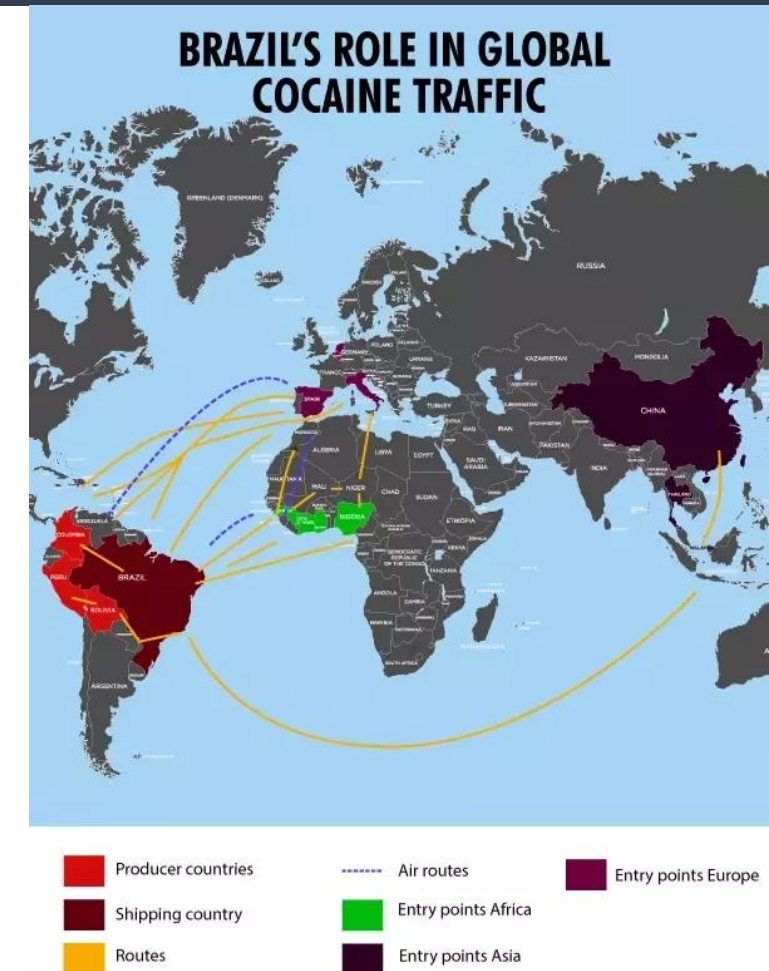
# The Syndemic Framework

Examines the health consequences of **disease interactions** and the **social, environmental, or economic factors** that promote such interaction and **worsen disease**.



# Introduction

- In 2012 Brazil was the runner-up on consumption of cocaine related products, 2nd only to the USA
- In Brazil, the crack use is associated with social inequity...
  - 19.4% of crack users live in poverty
- **The Crack/HIV/HCV Syndemic:** Crack use enhances the prevalence of HIV and HCV
  - Brazilian national prevalence of HIV and HCV was about **0.6%** and **0.9%** (2013)
  - The prevalence of HIV and HCV among crack users was **3.3%** and **1.9%**, respectively (2013)



# Design and Methods

## Brazilian Crack Survey

- National population-based survey between 2011 and 2013
- Used Time-Location Sampling methods
- Recruited crack users from **open drug scenes from all Brazilian states**
- Participants were tested for **HIV** (Fast-Check HIV test) and **HCV** (immuno-rapid test, Wama Diagnostic)
- We used a Multinomial Logistic Regression to estimate the association between risk factors and each syndemics category

<https://www.arca.fiocruz.br/handle/icict/10019>



# The Risk Factors

## Crack use

- Number of crack stones per day
- Time of crack use
- Shared paraphernalia

## Vulnerability

- Exchange sex for money/drugs
- Sex worker
- Spend nights in the street
- Incarceration in life
- History of sexual violence
- Low self esteem

## Health & Services

- Suicidal thoughts
- Anxiety/impatience/irritability
- Psychiatric hospitalization
- Had hospitalization
- CAPS-AD
- Harm reduction program
- Community therapeutics

## Reasons to start crack use

- Wish
- Low Price
- Friends pressure
- Emotional losses
- Bad life

## Other drug use

- Amphetamine/Methamphetamine
- Benzodiazepines
- Cocaine use
- Marijuana
- Alcohol
- Tabaco

## Demographics

- Sex
- Race
- Marital Status
- Schooling
- Regular income source
- Sporadic income source

# Results

## Factors of increased risk for HIV, not HCV crack users

- Being a female crack user (OR 4.0; 90%CI: 1.9-8.7)
- Sleeping on the streets (OR 1.7; 90%CI: 1.0-2.9)
- More intense use of crack (OR 2.1; 90%CI: 1.0-4.1).

## Factor of increased risk for HCV, not HIV crack users

- Sharing crack paraphernalia is a strong risk factor for HCV (OR 4.8; 90%CI: 1.7-13.9), not for HIV

## Factors of increased risk for both HIV and HCV crack users

- 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)
- 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

- The syndemics of **substance use and infectious diseases** vary according to population sub groups and their **environmental conditions**.
- By focusing on crack users, we could observe **unique risk** factors for HIV and HCV
  - Addiction severity, sexual violence, shared paraphernalia, exchange sex for drugs/money and **homelessness**
- Those could **only be unveiled on open drugs scenes**, where people go to use and buy drugs, so it is harder to deny its use



Merci!  
Thanks!



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