Challenges facing HIV-positive clients in methadone maintenance treatment in China

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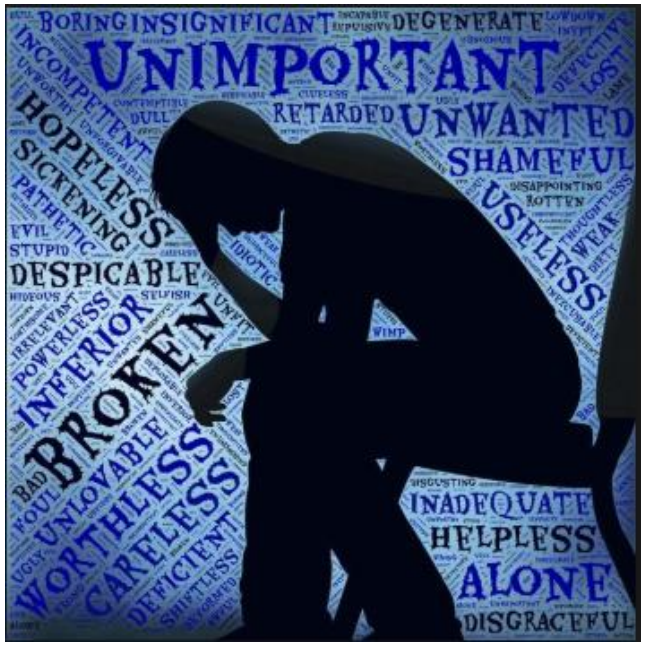
Background

- In China, HIV prevalence was 5.9% among people who injected drugs by the end of 2016.
- At the end of 2016, there were 789 methadone maintenance treatment (MMT) clinics in 29 provinces serving 453,500 clients.
- Despite the impressive progress, a wide range of challenges remain.

Challenges



- Comorbidities, e.g., HIV, HCV
- Concurrent drug use
- Mental health issues
- High drop-out rates
- Gaps between clients' needs and service coverage

Study objectives

- To describe the characteristics of HIV-positive clients in MMT settings
- To examine the disparities in heroin use and mental health issues between HIV-positive and HIV-negative clients

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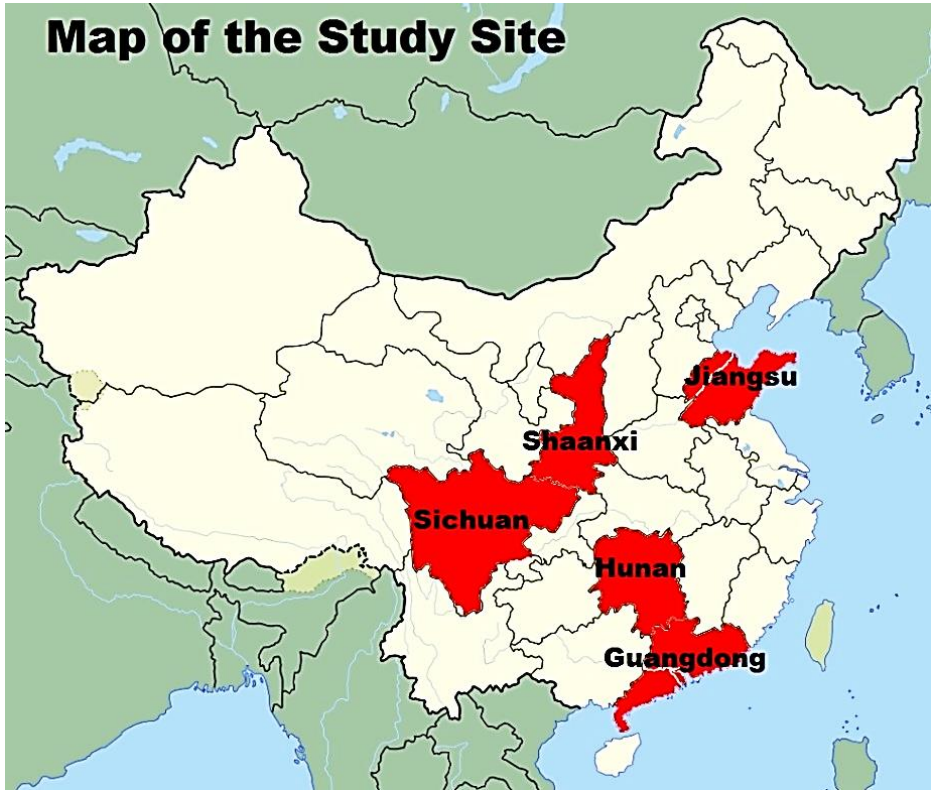
Methods



- Data: **Baseline data** of the intervention trial (R01DA033130) conducted between 2012 and 2013
- Sample: **68 Clinics**, with **36 clients in each clinic**, randomly selected in five provinces
- Assessment method: **Computer-assisted personal interview**
- Data analysis: **Descriptive analysis** and **multiple regression** models

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Measures

- **Concurrent heroin use**
  - Self-reported heroin use in the past 7 days, or
  - Positive urine morphine test
- **Depressive symptoms**: Zung's Self-Rating Depression Scale (Zung, 1965)
- **HIV status:** medical records
- **Other measures:**
  - **Demographics:** age, gender, year of education, marital status, employment status, and monthly household income
  - **MMT-related characteristics:** experiencing side effects (Y/N) and missing dose in last 30 days (Y/N)

Results

Table 1. Baseline characteristics comparison between HIV-negative and HIV-positive groups, N (HIV-negative) = 2275, N (HIV-positive) = 92

- Compared with HIV-negative clients, HIV-positive clients were more likely to
  - be unemployed, and
  - have lower monthly household income

- 69.6% HIV-positive clients in MMT settings were male
- The majority (57.6%) aged between 36 and 45

*: *p*-value <0.05 (Chi-square test)

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Results

Table 2. MMT-related characteristics and depressive symptoms between HIV-negative and HIV-positive groups

	HIV-negative (%)	HIV-positive (%)
Experiencing side effects	1122 (50.2)	41 (46.6)
Missing dose in last 30 days	878 (38.6)	37 (40.2)
Concurrent heroin use*	484 (21.3)	34 (37.0)
Depressive symptoms* (Mean $\pm$ SD)	16.4 $\pm$ 5.1	18.4 $\pm$ 5.7

*: *p*-value <0.05; Chi-square test for categorical variables, and t-test for continuous variables.

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Results

Table 3. Comparing concurrent heroin use and depressive symptoms between HIV-negative and HIV-positive groups

	aOR	95% CI
Logistic regression model*: Concurrent heroin use		
HIV-positive group (*versus* HIV-negative)	2.0	(1.3, 3.1)
	β	**95% CI**
Linear regression model*: Depressive symptoms		
HIV-positive group (*versus* HIV-negative)	1.8	(0.8, 2.9)

* Covariates included in the model: age, gender, education years, marital status, employment status, household income, experiencing side effects, and missing dose in last 30 days.

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Discussion

- This study highlights greater challenges facing clients living with HIV in MMT settings in China.

- To succeed in the MMT, HIV-positive clients are in need of extra attention and support to reduce concurrent heroin use and mental health issues.

Future directions

- MMT program could integrate comprehensive medical services, which could satisfy the service needs of the clients living with or without HIV.

- Psychiatrists should be involved in MMT clinics, or the service providers could be trained to provide psychological counseling for the clients in order to address disparities in psychiatric comorbidities.

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CHIPTS
Center for HIV Identification, Prevention and Treatment Services

CCH
UCLA-NPI Center for Community Health

CDC
CHINESE CENTER FOR DISEASE CONTROL AND PREVENTION