

Hepatitis C Virus Serosorting Among Young IDU (The UFO Study)

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Background

- Hepatitis C virus (HCV) infection in young (under age 30) IDU
 - HCV transmission rates among young IDU are high – 25-30% per 100 person years
 - 50% of young IDU are infected with HCV after a median of 5 years of injecting
 - While the infection rates are high, there is a window of opportunity for prevention
- Serological sorting (serosorting)
 - Defined as: Choosing sexual partners based on your and their serological status
 - Has been reported as an HIV risk-reduction strategy by men who have sex with men

Study Questions

- Do young IDU choose their injecting partners based on their own and their partners' HCV serostatus?
- Does a partner's HCV serostatus or lack of knowledge of a partner's HCV serostatus affect needle and equipment sharing with that partner?
 - Hypothesis: Injecting risk behaviors will be less common among serodiscordant injecting partnerships or partnerships in which the HCV status of the partner is not known.*

Methods

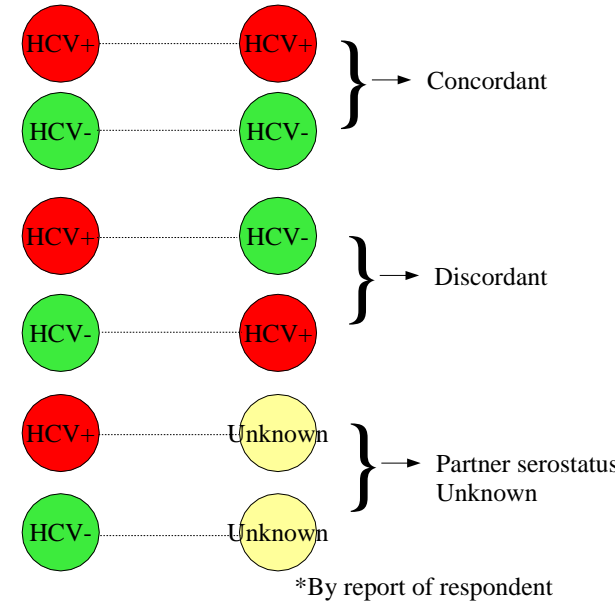
- Cross sectional study of young IDU
 - Injected in the prior 30 days
 - Age <30 years
- Recruited via street-based outreach
- Structured interview
 - Survey included questions about relationship, injecting, sexual behaviors, with up to 3 injecting partners in the prior month.
 - HCV status of each partner also reported.
- Study conducted 2002-2005 in San Francisco

Methods (cont'd)

- Phlebotomy and testing for HCV antibody (EIA 2.0) and HCV RNA
- Risk reduction counseling and referrals
- HAV/HBV immunization
- \$10 at time of interview and phlebotomy, \$20 at time of results disclosure (1 week later)

Definition of Partnership HCV Characterization

Respondent HCV status Partner HCV status*



Definitions of Injecting Partnership Risk Behaviors

- Sharing drug preparation equipment** = preparing drugs with partner in the same cooker/cotton/spoon
- Sharing potentially contaminated drug preparation equipment** = preparing drugs with partner in the same cooker/cotton/spoon, that had been used with a previously used needle/syringe or a needle/syringe whose previous use was unknown

Results

- Number studied with HCV results*: 255
- Number reporting at least one injecting partner: 209
- Number of injecting partners, total: 445

*13 persons newly infected with HCV (HCV antibody negative, RNA positive) were removed from analysis

Sample Characteristics, N=209

Characteristic	Result
Age, median (IQR)	24 (21-26)
Sex=female	26%
Race=non-White	27%
Homeless prior 3 months	71%
Years injected drugs, median (IQR)	5.7 (2.9-8.7)
HCV antibody positive	39%

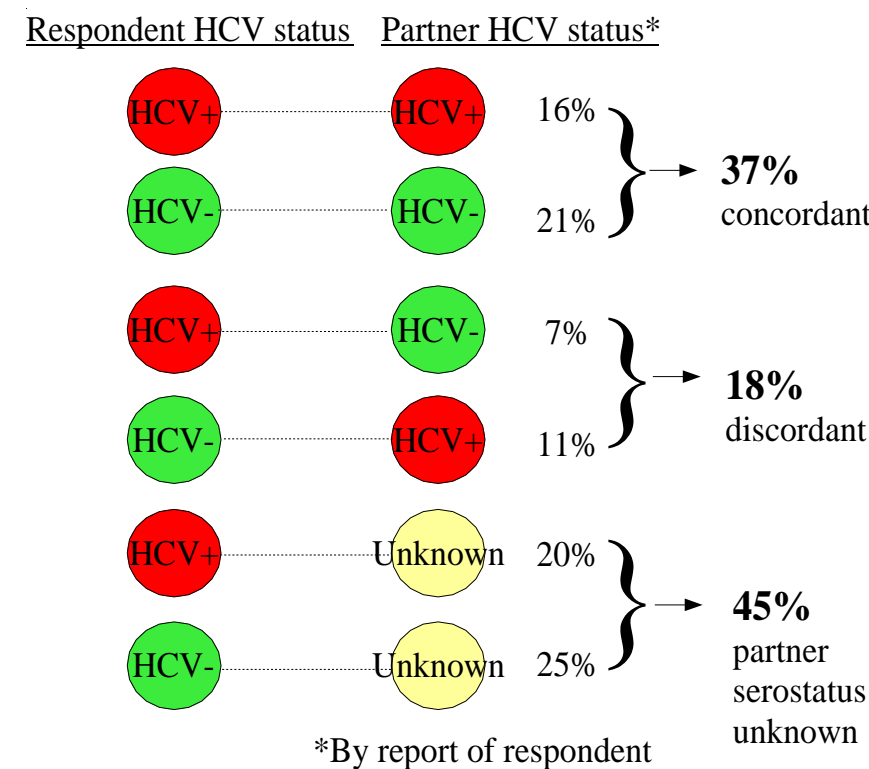
Injecting Partnership Characteristics, N=445

Characteristic	Result
Duration acquainted with partner, median (IQR)	12 (2-36)
Lived or stayed with partner, prior month	64%
Partner age difference, years, median (IQR)	0.10 (-2.5-3.8)
Sex mix of injecting partnerships	
Male/Male	27%
Female/Female	5%
Male/Female or Female/Male	67%

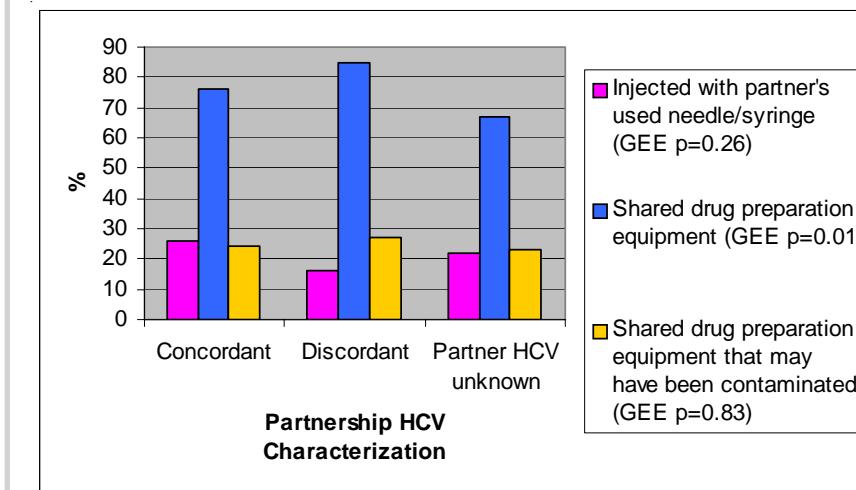
Injecting Partnership Behaviors in the Prior Month, N=445

Characteristic	Result
Injected with partner's used needle/syringe	22%
Shared any drug preparation equipment	73%
Shared potentially contaminated drug preparation equipment	24%
Injected with partner ≥3 times per week	47%
Pooled money to buy drugs	81%
Injected by partner	22%
Had sex with injecting partner	33%
Number of partner's other injecting partners	
0	13%
1 or more	49%
Don't know	38%

Injecting Partnership HCV Characterization, N=445



Needle and Equipment Behavior by Partnership HCV Characterization, N=445



- Interpretation:
 - 22% of respondents injected with their partner's used needle/syringe, regardless of partnership HCV characterization
 - Drug preparation equipment sharing occurred more frequently among injected partnerships that were HCV concordant or HCV discordant compared to those in which the HCV status of the partner is not known
 - Drug preparation equipment sharing with potentially contaminated equipment occurred with lower frequency, and was not related to partnership HCV characterization

Conclusions

- Serosorting by HCV status among young IDU is not widely occurring
- Almost half young IDU injecting partnerships are with persons of unknown HCV serostatus
- Injecting with a partner's used needle/syringe borrowing and sharing potentially contaminated drug preparation equipment with a partner did not vary by partnership HCV characterization
- Sharing cookers/cottons was less common with partners of unknown HCV serostatus

Acknowledgements

- UFO Study staff
 - Erin Antunez, Pamela Axelson, Clara Brandt, Alya Briceno, Shanel Coleman, Caycee Cullen, Rosary Giuliano, Zizi Hawthorne, Gina Limon, Martha Montgomery, Peter Morse, Sutapa Roy, Stacey Rubin Robert Thawley, Nickie Tilsner
- Co-investigators
 - William Andrews, Michael Busch, Eric Delwart, Leslie Tobler, Andrew Moss, Bruce Phelps
- NIH R01 DA16017