Risk Behaviors and Gaps in HCV Knowledge Among Young Suburban People Who Inject Drugs

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Background

- Hepatitis C (HCV) infection among young (aged ≤30 years) suburban persons who inject drugs (PWID) is a growing epidemic in the United States.
- Injection drug use is the most reported risk behavior among this group. [1-8, 9-11]
- Research has shown acute HCV among young adult PWID is two times greater in non-urban areas compared to urban settings—yet little is known about the factors contributing to high rates among young suburban PWID.
- We sought to understand young suburban PWIDs' risk behaviors and how they relate to gaps in their HCV knowledge.

Methods

- We recruited a convenience sample of 14 young suburban PWID accessing a syringe exchange program in Newark, NJ.
- Inclusion criteria: 1) age: 18-35; 2) active injection drug use; and 3) currently or recently residing in suburban areas of New Jersey.
- We conducted semi-structured interviews that addressed:
  1) Drug history: including risk behaviors and progression to injection drug use.
  2) HIV/HCV-related: status, transmission, barriers to treatment, stigma, and intent to seek treatment if tested HCV+.
- Interviews were recorded and professionally transcribed.
- Transcripts were analyzed using a modified grounded theory approach and the constant comparative method.
- We then generated a list of descriptive codes and identified emerging themes.[12]

Demographics

- Respondents were 9 males and 5 females: with 11 identifying as non-Hispanic white and 3 as Hispanic/Latino.
- Age range: 23-33 (median 26 years).
- Four graduated high school/GED; 5 attended college.
- Half initiated prescription opioid use during their teenage years (range: 13-18) and half as young adults (range: 20-28).
- All respondents transitioned to heroin.
- Related to injection drug use:

1) All sniffed prior to injecting.
2) Age at first injection ranged from 15-28 years.
3) All reused their own syringes.
4) Half admitted to sharing syringes.

Table 1. Risk Behaviors

Theme	Illustrative Quote
Rationalizing Risks Behaviors: Misplaced trust leading to risks	*"By the time I got over there, he had it [heroin] in the cooker ready… he was like, 'Well, I got it in the cooker now, so... It's either you're going to shoot up, or I can't give you anything.' So he had a clean needle, a new needle, so I just tried it out for that one day."*
	"The only person I shared needles with was this kid that—not that I knew for sure he was clean, but he had just come out of rehab…And because I had just started using, I never had either."
	"He swore, he swore to me on everything that he wasn't sharing needles. When he called me last night from the detox, he was hysterical crying… And he said, 'I just found out I have hepatitis C.'"
Secondary Risk Behaviors: Reusing and/or not properly cleaning syringes	*"I've heard of so many people doing that, 'Oh, you can share a syringe if you use bleach.' Alright, well, bleach doesn't kill all germs…Rubbing alcohol, at least I know doctors and shit use it to sterilize things."*
	"I'll use water [to clean a syringe]. And you know, I'll like flush it out …if I have like rubbing alcohol, I'll kind of like inject it and let it sit in there for a minute or two…"
	"And I would just literally sit there [cleaning a syringe], like 30 minutes, like sucking up the water and shooting it out, or like flicking it and reshooting it…"

Results

- A majority of respondents reported risk behaviors, primarily sharing syringes, yet reported minimal concern about contracting HCV as a result.
- All participants had substantial gaps in HCV knowledge.
- Most were aware that HCV is a blood-borne virus, but had minimal knowledge regarding the transmission, symptoms, and effects of HCV.
- However, if tested HCV+, all participants said they would seek treatment.
- Based on these findings, we identified five major themes in two categories:
  1) **Risk Behaviors:** rationalizing risk behaviors and secondary risk behaviors (see Table 1).
  2) **HCV knowledge:** substantial gaps in HCV knowledge; misinformation; and intent to pursue treatment if tested HCV+ (see Table 2).

Table 2. HCV Knowledge

Theme	Illustrative Quote
Gaps in HCV Knowledge	**Transmission:** *"I'm pretty sure you can get it from sharing needles or getting it from someone who has it. Or you can get –that way, right? Blood or semen."*
	Long-Term Effects: *"Yeah, doesn't it, like, eat your liver, just alive?...I'm really not 100 percent sure. I know her brother has, like, gone over everything with me, but I was like, 'Dude, I don't want to hear this, that's disgusting.'"*
	Current Treatment: *"I just know it's medication… I'm going to guess they're going to treat it like anything else, right? Give you some pills and tell you to be more careful."*
Misinformation	**Transmission:** *"I know that I can get it from myself, if I like have a dirty—like a needle that has blood in it, or microscopic blood that is in like—"* *"From what I've been told you supposedly can create Hep C on your own."*
	Current Treatment: *"I don't know the exact name of the [HCV] medication, but I know that people who have been on the medication, they say it feels like you're like burning up…And a lot of them forgo the treatment because of the side effects from the medication."*
Intent to Pursue Treatment (if HCV+)	*"I'd want [HCV] treatment, and I'd probably be, like, highly embarrassed…I'd do any type of treatment."*
	"Hell yes… I would never kill myself [from not getting HCV treatment]. I'm not suicidal.''
	"Depending on what the [HCV] treatment, how much it costs, but yeah, I would probably try to get treated. It's the smart thing to do."

Conclusions and Clinical Implications

- **Conclusions:**

1) This is the first qualitative study to assess young suburban PWIDs' risk behaviors and how they relate to HCV knowledge in New Jersey.
2) The results from this study indicate that most young suburban PWIDs had minimal knowledge of HCV.
3) However, all respondents expressed interest in treatment if tested positive for the disease.

- **Limitations** include a small sample size that was geographically-limited to suburban New Jersey, which may limit the external validity of this study.
- **Implications:** HCV education tailored towards young suburban PWID may help them to reduce risk behaviors, comprehend and retain accurate HCV knowledge—and further motivate them to seek HCV testing and treatment.
- **Future research** should employ a mixed-methods approach with larger sample sizes to assess the impact of tailored HCV education on improving health outcomes for this population.

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