The Intersection of HIV, HCV and Persons Who Inject Drugs Gary F. Spinner, PA, MPH, AAHIVS and Bryan Gallego, RN

Background

As opioid use in the U.S. has risen, outbreaks and clusters of HIV and HCV infections have occurred in many rural, urban and suburban locations. In 2014-2015 there was an outbreak of HIV in rural Scott County Indiana in people who injected drugs (PWID) where 231 new cases of HIV, with 92.3% co-infected with HCV. Additional HIV outbreaks among people who inject drugs occurred in Lowell and Lawrence, Massachusetts (2018), Seattle, Washington (2018), and Cabell County, West Virginia (2019). In each outbreak, a simultaneous increase in new HCV infections occurred, with nearly all cases linked to injection drug use. Given the curative treatment for HCV, access to HCV treatment for PWID is essential to control the spread of HCV and work towards its elimination.

Importance of Treating HIV/HCV Co-infection

Coinfected patients have a more rapid progression of liver disease. More likely to progress to cirrhosis. More likely to develop hepatocellular carcinoma

Have a higher mortality rate.

At Southwest Community Health Center, in 2013 we began treating both HIV/HCV co-infected patients and HCV mono-infected patients starting when second generation direct acting agents (DAA) became available. Given the more rapid progression of liver disease in HIV coinfection, and the significantly higher mortality rate from liver disease in co-infected patients, our goal was to treat all co-infected patients.

Many established HCV treaters in 2013 believed that patients needed 6 months of sobriety before treating HCV. Our experience treating patients with HIV demonstrated that injection drug use need not be a barrier to successful treatment. We have therefore treated all HCV-infected patients agreeable to taking medication and keeping appointments, regardless of drug or alcohol use...

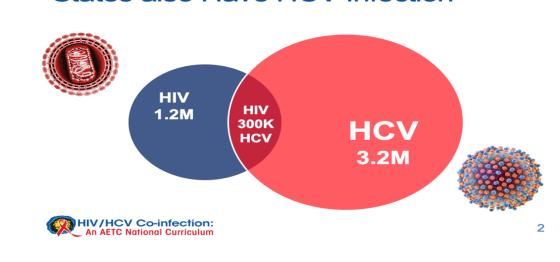
The Importance of Treating PWID and Provider Barriers

- Among the 4 main Provider barriers to HCV treatment.
- Provider perception that PWID are poor candidates for treatment
- Provider concerns regarding adherence
- Provider perception that substance use may affect treatment outcomes

83% of PWIDs

have HCV co-infection

Provider concerns regarding risk of re-infection.



The reality of our experience is that PWID are good candidates for HCV treatment as cure of HCV improves patient outcomes and reduces transmission to others.

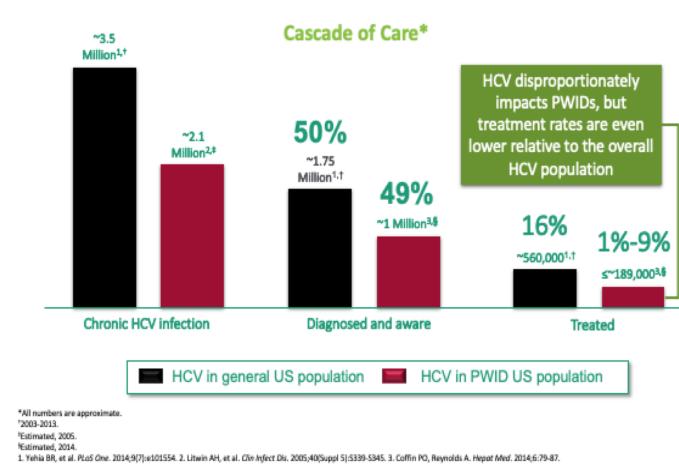
At Southwest PWID display comparable adherence as non-drug users, treatment outcomes are comparable to non drug users, and the reinfection rate has been low.

PWIDs Are Often Co-infected With HCV and HIV Among the HIV-positive population in North America

HIV Monoinfection
HIV/HCV Co-infection

~153,000 PWIDs have HIV/HCV co-infection in North America

12% of non-PWIDs have HCV co-infection HCV Is Underdiagnosed and Undertreated, Even More for PWIDs



Platt L, et al. Lancet Infect Dis. 2016;16(7):797-808.

Southwest Community Health Center

About 25% of PLWH in the United ates also Have HCV Infection^{17,21}

The Southwest Community Health Center Results

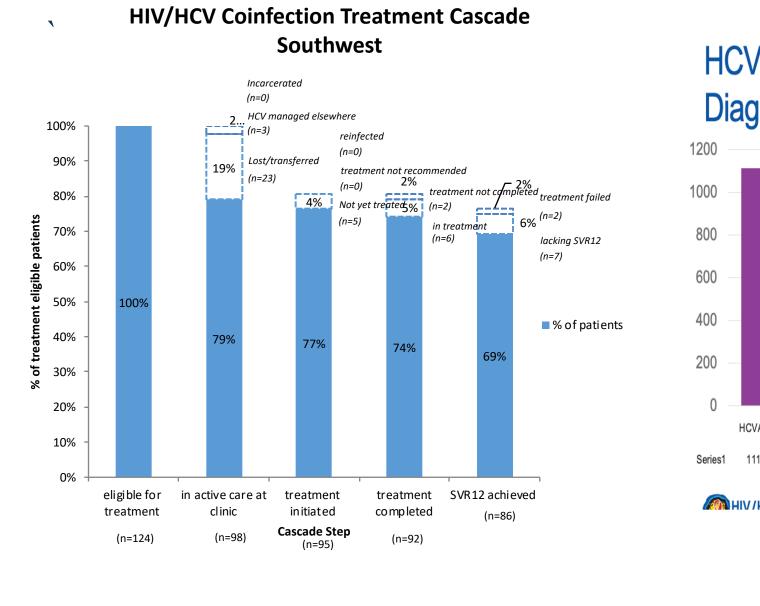
We have treated 366 patients with chronic HCV as of August 1,2019. 83% of all our treated patients have current or past history of drug dependence, with injection drug use the primary route of use.

30% of our HIV patients are/were co-infected with HCV and 76% have a past or current history of substance dependence

Of 101 co-infected patients with chronic HCV, all but two have been, or are currently being treated=98%.

The reinfection rate among persons injecting drugs is low at 1.4%. The SVR 12 rate of cure for patients completing treatment and returning for lab tests 12 weeks post treatment is 98%. (Not all patients have returned for SVR check after treatment) 41% of all patients had significant fibrosis of F3 or F4 and are screened for Hepatocellular carcinoma every 6 months (in patients having multiple fibrosis measures, i.e. elastography and serum markers, the higher score was utilized).

Access to HCV medications has been extremely good, and we have not been unable to treat any HCV patient who has been willing to be treated. CT Medicaid covers every recipient, commercial insurance has approved all patients, albeit with provider advocacy. We have obtained free medication for the uninsured.



HIV, HCV and MSM

There has been an increase in MSM who inject drugs- with methamphetamine a drug of choice for many MSM.

MSM already account for 67% of all new HIV infections. There is concern that MSM with HIV who inject methamphetamine and share injection equipment could lead to new outbreaks of HIV and HCV among both MSM and non-MSM PWID.¹

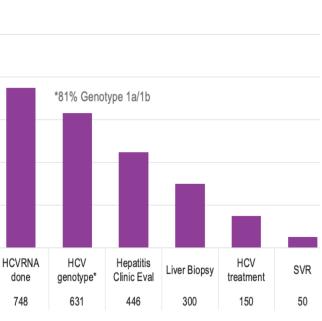
MSM who inject meth have an HIV prevalence 50% higher than MSM who inject other drugs.² MSM with and without HIV are at risk for sexual acquisition of HCV

unprotected fisting, sexualized drug use, ulcerative STIs

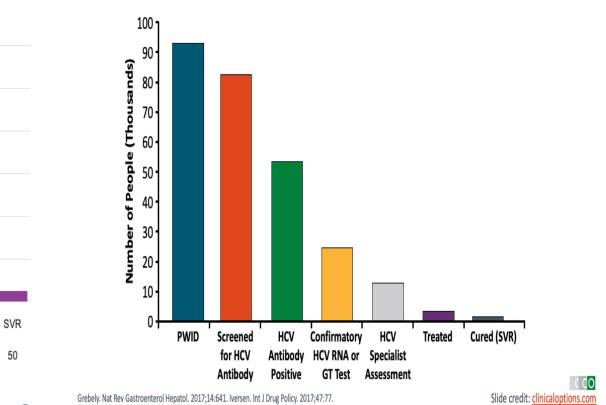
Multifaceted treatment and prevention approaches are needed to eliminate HCV among MSM

- Screening: MSM initiating PrEP should be screened for HCV infection at PrEP initiation and at least annually thereafter based on risk
- HCV infection or transmission

HCV Cascade in PLWH following HCV Diagnosis, CORE Center⁵



The Challenge: HCV Care Cascade Among PWID



substance using patients. opioid substitution with Buprenorphine. same provider(s).

Ob/Gyn to enhance HIV prevention.

Mortality from HCV is higher than from HIV

HCV Deaths Surpassed HIV Deaths in

- Factors that increase risk: condomless receptive anal intercourse, sharing sex toys,

- Counseling: all MSM should be counseled about the risk of sexual HCV transmission based on sexual and drug use practices, and educated about measures to prevent



Lessons Learned

- Given the ease of HCV treatment for as little as 8 weeks of oral therapy, treatment success is no different whether provided by physicians, physician assistants or nurse practitioners.
- All patients screened positive by HCV antibody and HCV RNA confirmation should be offered treatment. Co-infected patients have more rapid progression of liver disease.
- Persons who use drugs or alcohol should be offered treatment, and outcomes are comparable to non-
- Reinfection of PWID is low, and studies show that treatment of PWID is cost-effective.
- Treating HCV prevents HCV transmission and lowers incidence of new infections.
- Pre-exposure prophylaxis of HIV (PrEP) should be offered to persons who inject drugs and have risk
- factors such as sharing injection equipment, multiple sex partners, condomless sex, etc.
- Community Health Centers are ideal places to implement HCV screening and treatment.
- At Southwest we offer co-located primary care, dental, and behavioral health care, as well as
- Our model of care combines Prevention services and integrated primary care and HIV/HCV care from the
- Ten primary care providers now offer HIV Prevention with PrEP, in Internal Medicine, Pediatrics, and
- Over 250 patients prescribed PrEP helping reduce HIV incidence.

