New Paradigms in HIV Treatment and Prevention for PWID

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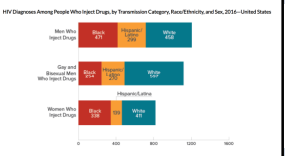
I have no disclosures to report…

Unfortunately.

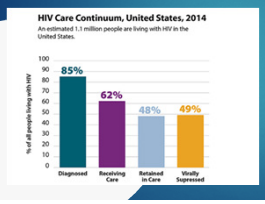
The Statistics

Overall there was a 32% reduction in HIV infections among PWID from 2010-2014.



Over 196,000 PWID were living with HIV in 2014 and about 7% of them did not know they were infected.

The HIV Care Cascade



PWID ARE:

-LESS LIKELY TO BE DIAGNOSED WITH HIV.

-PRESENT TO CARE LATER THAN THOSE INFECTED VIA SEXUAL TRANSMISSION (CD4 COUNT OF 69 VS 96 ON PRESENTATION).

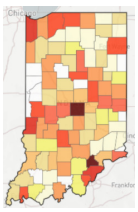
-LESS LIKELY TO BE 'SUCCESSFULLY MANAGED' OR VIRALLY SUPPRESSED.

A Formula for Disaster

Rural Indiana Struggles to Contend With H.I.V. Outbreak

HIV is surging in Lawrence and Lowell. The CDC wants to know why

The Indiana Outbreak



135 new HIV cases in a county of ~4,200 people

This approximately a 3.2% seroprevalence rate of HIV, similar to that of Rwanda.

Hepatitis C coinfection was found in approximately 114 of the patients.

Traditional Approaches

Harm Reduction

Syringe Access Programs

Safer Injection Techniques

Serosorting

Route of Administration Counseling

SUD Treatment

Inpatient detoxification prior to initiating antiretrovirals (ARVs)

Methadone Maintenance Programs

Universal Screening

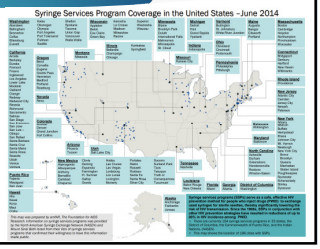
Screening all patients who report injection drug use at initiation of care

Harm Reduction

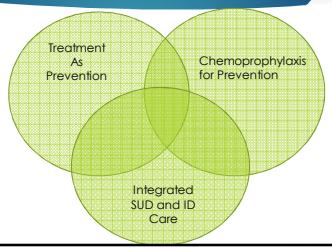
Investment of $10 million dollars in safer injection sites would result in:

194 new HIV infections averted in 1 year.

Lifetime treatment cost saving of $75.8 million dollars.



Novel Approaches



Treatment as Prevention

- Early access and medication adherence soon after diagnosis.
- Undetectable = Untransmissable (U=U)

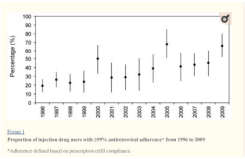
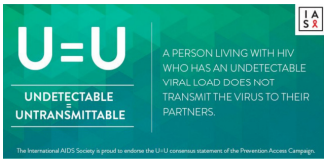


Figure 1
Proportion of injection drug users with ≥95% antiretroviral adherence* from 1996 to 2009
*Adherence defined based on prescription refill compliance.



Chemoprophylaxis for Prevention

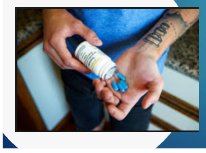
Pre-Exposure Prophylaxis (PrEP)

THE BASICS

- Patient must be HIV negative to start.
- Need to have kidney function WNL.
- Patients should be tested for HIV and STIs including HCV q3-6 months.
- Take 1 pill daily.
  - Currently the only approved medication is TDF/FTC, with others currently being researched.

Chemoprophylaxis for Prevention

Pre-Exposure Prophylaxis (PrEP)



Cost Effectiveness

- Recent studies have shown that universal roll out of PrEP among PWID would not be cost-effective for the system.
- There is a role for the use of PrEP in the highest risk populations and in counties and areas at high risk for an outbreak.

Chemoprophylaxis for Prevention

Post-Exposure Prophylaxis (nPEP)

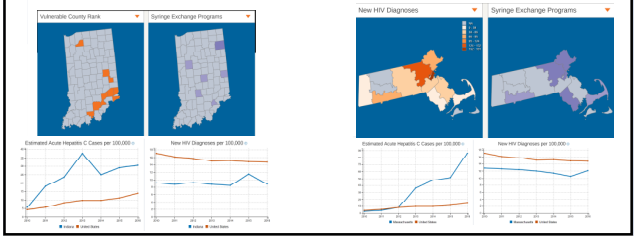
PEP involves taking anti-HIV drugs as soon as possible after a potential exposure

to prevent HIV infections.

The BASICS

- The patient should have an HIV test at the time of initiation of medications.
- Generally a three drug regimen (two pills) TDF/FTC + DTG.
- Taken for 28 days with follow up testing at 1mos, 3mos, and 6 mos.

Targeting Chemoprophylaxis Efforts



Integration of Care

FIGURE 4-1. ROLE OF THE GLUE PERSON.

Key Components of Integration of Care

Data 2000 made it possible for primary care physicians to provide medication treatment for SUD.

HIV primary care visits are separate from SUD treatment and management visits.

Safe, non-judgmental environment with the ability to start medications right away and referral options for other levels of treatment if necessary.

Case Study 1-Opioids TasP

CP is 58 yo AA female who relapsed on heroin and fentanyl after the death of her husband and her dog. The pt had been in sustained recovery for over 10 years prior to her relapse.

Despite the patient's relapse on illicit opioids she was able to maintain an undetectable viral load with VL checks q3mos.

At q3mos follow up visits the patient's SUD was always addressed with the option to initiate bupe maintenance with each MD and RN visit. Pt was provided with OD prevention counseling and given a rx for nasal naloxone.

After multiple visits the pt was agreeable to bupe induction and remains engaged in HIV and SUD care today after 18 mos of bupe.

Case Study 2-Opioids PrEP

JB is a 28 yo white MSM with a polysubstance use disorder referred to the clinic from the medicine floor s/p overdose and detoxification. The pt uses IV versed, hydromorphone, fentanyl, phenobarbital, and ketamine, smokes MJ, and has a rx for clonzepam. The pt shares needles and has sex without condoms.

Upon d/c the pt is on a bupe maintenance dose of 8mg TID, clonazepam 1mg TID, gabapentin 400mg QID, and levitracetem 1,500mg BID for treatment of a seizure disorder and his SUD.

Started on TDF/FTC. Despite contracting rectal and oropharyngeal STIs and a HCV VL of 588,000. Pt has missed none of his 8 outpatient clinic visits in his 2 months since discharge.

Pt has recently relapsed and ultimately required a Section 35, legal mandate to treatment, but has been adherent to the PrEP and remains HIV negative.

Case Study-Meth TasP

SC is a 31 yo white male who has been poorly engaged in HIV care since his diagnosis in 2014. The pt reported using IV methamphetamines daily, up to $90 daily, and would occasionally take opioids when he was in withdrawal from the stimulant.

In 2016, the patient had an HIV VL of 6,020, an RPR 1:8, HCV VL of 3,160,000, and rectal gonorrhea. The pt presented to the clinic with a partner at this time who also tested positive for HIV at the same time.

The Glue Person, insisted on initiation of ARVs despite severe SUD and simultaneous rx of oral naltrexone and bupe.

Within 2 months the patient had an undetectable HIV viral load and reported 98% medication adherence to the ARVs. To this day the patient has remained virally suppressed despite repeat syphilis and CT/GC infections and despite continued polysubstance use.

Case Study-Meth, PrEP

KR is a 38 yo white MSM on PrEP for many years who reports regular participation in chemsex including the use of IV methamphetamines and PO GHB. Pt has a hx of IV heroin use and was formerly a nurse who lost his license 2/2 diversion while at work.

KR has been diagnosed with 5 rectal STIs between 2017-2018. The pt has been reinfected with syphilis and has high grade anal dysplasia. However the patient has remained HCV and HIV negative.

After 2 years of low threshold PrEP and SUD counseling the patient requests assistance in accessing SUD treatment for chemsex addiction. The pt continues to receive SUD counseling and trauma support in the clinic.

The pt has only relapsed once since formerly receiving SUD treatment and engaging in SUD care. The relapse lasted 2 days and the pt refrained from IV use.

Questions?

THANK YOU FOR YOUR TIME!

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