



# HIV in Rural Settings

The challenges of preventing and  
treating HIV in Rural **DIN4 BIKEYA.**

# Disclaimers and biases

- I am a GIMC employee working with Dr Iralu, the IHS infectious Disease Consultant. My position at IHS is funded by a Minority AIDS Initiative Grant.
- We have no relationship with the pharmaceutical industry or any other nongovernmental entity.

Stigma of HIV infection, isolation in rural settings and ETOH abuse... all overlain by poverty and transgenerational PTSD complicate care in rural Indian country.



# 4 Case studies



# Case 1: 72 year old “Grandpa”...and nobody knows...

- HIV Dx'd in 2007. Lists behavior under influence of ETOH as his only risk. Had been seen by a distant contracting facility and came to us as a consult in 2011.
- Hx HTN, Systolic murmur and Glaucoma.
- Missed 5 appointments out of 7 here in the first year at GIMC. Reported “I get my meds at the other hospital”
- Lab results and patient admission indicate he has not taken his medication.

RN unable to find patient...not at home  
once his housing is located.



Not his house.

# Enter the newly hired Navajo health technician!

- The health tech, Watson Billie, was able to determine from the patient's family that he left home every morning early, to herd his sheep...not returning til 7:00.



So...the HT started his day 1 hour early to catch the patient over breakfast....

- The health tech, at times in company with the RN , established a routine of visiting this patient two to three times a week to deliver mediplanners and do pill counts.
- He was able, in Navajo, to explain the need for medication and medication adherence.
- Using prepared flip charts he was able to explain the disease.

“Health Care from the Hogan up..”



# After two months

- VL: 40 (!)
- CD4: 213
- AND...added bonus...the blood pressure is under control!

# Case 2...the case for sobriety

- 45 year old transgendered... M to F.
- Lives with aged mother and stepfather in rundown reservation housing near other relatives.
- Estranged from his family....not because of her HIV or sexuality, but due to drinking behavior.
- “Its your peoples’ fault that (blank) is like that...drunk all the time. You got him SSI.”, says a relative next door.

# On the streets of Gallup...



Patient will disappear from home for weeks at a time  
...living on the streets of Gallup with frequent stays at  
NCI to sober up or for shelter.

# Revolving door of ETOH treatment.

- Has been thru several ETOH treatment programs .
- Has at times been adherent with meds and kept appointments, but has dropped out in last 9 months.
  
- CD4: 310 on 2/28/12
- VL: 280
  
- **Now**
  
- CD4: 353 on 10/4/12
- VL: 127,010

# What is the patient's plan....

- She presented recently as a walk-in to me s/p assault. She admitted that she was no longer taking medications.
- “I am doing ceremonies”
- She had ETOH on her breath but was relatively sober and before sending her to Urgent Care for assault assessment and after drawing her labs, I obtained her commitment to “see how the ceremony goes” by coming in for testing from time to time.
- Also discussed ETOH Tx, which she is not ready for at this time.

# And so...

- Hopefully by maintaining good relations with her, (“rolling with resistance”...as they say) she will continue to stay in touch, and decide to get sober and take her medications.

# Case study...



40 something male

Presents to Urgent care over the course of a month with rash over face and chest, fever, malaise and body aches.

Unremarkable sexual history, (at first)

Routine HIV drawn one month ago...still “active” in EHR

- UCC requests a rapid HIV, which is reactive.
- Requested our lab call for prior HIV results and this yields that the prior result was: **reactive ELISA, negative WB.**
- Panel of labs ordered: Repeat HIV AB, HIV RNA (viral load), CD4, and GenoSure, in addition to routine UCC labs already collected.

What is going on here?



# Acute HIV syndrome

- Viral load drawn at the time of rapid testing returned a “> 10 million” result
- CD4 178
- Genosure demonstrated pansensitive virus
- Repeated HIV AB test: ELISA reactive and WB indeterminate with GP 160 still equivocal.

# Patient reaction

- Client quite distraught
- Expressed suicidal ideations
- Very ambivalent regarding his sexuality. “ I used to have a girlfriend...”
- On discharge engaged in drinking behaviors and did not want to return to work.

# Team approach to the patient's care

- Behavioral health made a home visit and began a series of intensive interventions for this person with a suicide Hx in his family.
- Office of Native Medicine intervened for this person, with traditional belief systems.
- Social Hygiene personnel visited several times with the client to both assist him in contacting partners for testing, and for counseling.
- The HIV program nurse and health tech made home visits and provided counseling over the phone for the client and his partners... testing his partners with the rapid test.
- The physician started antiretroviral therapy once his Genosure documented he was pansensitive. Because he was depressed and potentially suicidal, Atripla was not used in favor of boosted atazanavir and Truvada.
- He was referred to Navajo AIDS Network and received counseling and support especially helping to explain HIV to the client's family in Dine.
- Patient entered into AA to assist his sobriety.

# It takes a Village!



# And now?

- Some time later, our patient has gone back to work, and is fully adherent with his HIV medications.
- His viral load is undetectable and his CD4 is much improved....>400.
- He has started antidepressant therapy (sertraline) and continues to receive counseling and support from AA, Behavioral health, ONM and the rest of the HIV team.

## Case # 4 Not someone like her....

- 67 year old female is brought to our Urgent Care for a “second opinion” by a relative, concerned about a two year history of recurrent respiratory illness, weight loss and rash.



Stock photo

- She had been seen by two separate service units, several times in the prior two years.



# Medical Dx and studies within just the last year:

- Post herpetic neuralgia
- UTI
- Bronchitis

## Studies...

- Pulmonary Function tests
- CT

## And then...

- At this presentation the Urgent Care physician requested a rapid result HIV test which in 10 minutes produced a positive result.



She was admitted and found to have a Viral load of  
>30,000 and Cd4 of 91. AIDS

# The key?

- Our Urgent Care provider had the advantage of a family member revealing a possible strong HIV risk in the patient.
- The other advantage our staff had, was the availability of a rapid result POC HIV test.

## Uni-Gold™ HIV Finger-Stick Procedure



1. **Collect Finger-Stick Sample**
2. **Dispense entire Sample into Sample Port**
3. **Add 4 Drops of Wash Solution**
4. **Read Test Device between 10 and 12 Minutes**

Stigma and denial can apply equally to medical providers.

This patient is now doing very well, and with the help of her family is adherent to her medications.

- CD4 now: 172
- Viral load: <20!!

Thank You and stay safe out there!



- Now lets go out and save some lives!