Findings from the HRSA SPNS Women of Color Initiative: Women of Color Co-Infected with HIV and HCV

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- Jennifer E. Lee, MPH, Project Director for POWER at SUNY/HEAT
In this presentation we will discuss

- HIV and HCV prevalence
- Co-occurrence of HIV and HCV
- Special challenges of treating HCV
- Results from the WOMEN of Color Study of which POWER was a part
- Make recommendations for interventions and treatment
HIV in the United States: The Stages of Care

**HIV CARE CONTINUUM:**

THE SERIES OF STEPS A PERSON WITH HIV TAKES FROM INITIAL DIAGNOSIS THROUGH THEIR SUCCESSFUL TREATMENT WITH HIV MEDICATION

- **DIAGNOSED WITH HIV**
- **ENGAGED OR RETAINED IN CARE**
- **LINKED TO CARE**
- **PRESCRIBED ANTIRETROVIRAL THERAPY**
- **ACHIEVED VIRAL SUPPRESSION**
HIV Care Continuum: National Perspective

- 1.2 million Americans living with HIV
- 4 in 10 were in HIV medical care
- 3 in 10 have their virus under control (VLS)
More People in Care = Achieving VLS

Achieving Viral Suppression: More People with HIV Need to be in Medical Care

- 30% Virally suppressed
- 70% Not virally suppressed

People living with HIV

- 66% Diagnosed but not in care
- 4% In care but not on ART*
- 10% On ART but not virally suppressed
- 20% Not diagnosed

*Antiretroviral therapy

Sources: CDC National HIV Surveillance System and Medical Monitoring Project, 2011.
Between 2.7-3.9 Million People Living with HCV in USA

- HCV attacks the liver
- May lie dormant for 10-30 years
- People infected with HCV may not know they have HCV
- Up to 20% spontaneously clear the virus
- HCV is associated with substance use and therefore denial/stigma
- Pre-existing HIV infection appears to:
  - increase the risk of HCV infection
  - intensify HCV symptomatology,
  - HCV disease progression.
- More people die of HCV (N~19,000) than HIV (N~16,000) each year
- Women comprise 19% new diagnoses of hepatitis C in US (8,328 in 2014)
2012 CDC recommendations

• Adults born between 1945 - 1965 should be tested once (without prior ascertainment of HCV risk factors)

• HCV testing is recommended for those who:
  ✓ Currently injecting drugs
  ✓ Ever injected drugs (once or a few times many years ago)
  ✓ Have certain medical conditions

• NY State law requires that medical providers ask patients who fall into CDC risk categories (above) if they would be screened
Figure 2. Treatment Cascade for People with Chronic Hepatitis C Virus (HCV) Infection, Prevalence Estimates with 95% Confidence Intervals.

- Chronic HCV-Infected*: 100%
- Diagnosed and Aware†: 50%
- Access to Outpatient Care‡: 43%
- HCV RNA Confirmed§: 27%
- Underwent Liver Biopsy‖: 17%
- Prescribed HCV Treatment¶: 16%
- Achieved SVR**: 9%

* Chronic HCV-Infected; N=3,500,000.
† Calculated as estimated number chronic HCV-infected (3,500,000) x estimated percentage diagnosed and aware of their infection (49.8%); n=1,743,000.
‡ Calculated as estimated number diagnosed and aware (1,743,000) x estimated percentage with access to outpatient care (86.9%); n=1,514,667.
§ Calculated as estimated number with access to outpatient care (1,514,667) x estimated percentage HCV RNA confirmed (62.9%); n=952,726.
‖ Calculated as estimated number with access to outpatient care (1,514,667) x estimated percentage who underwent liver biopsy (38.4%); n=581,632.
¶ Calculated as estimated number with access to outpatient care (1,514,667) x estimated percentage prescribed HCV treatment (36.7%); n=555,883.
** Calculated as estimated number prescribed HCV treatment (555,883) x estimated percentage who achieved SVR (58.8%); n=326,859.

Note: Only non-VA studies are included in the above HCV treatment cascade.
System Challenges

- Highest rates HCV of infection occur:
  - Among those with less than a high school education
  - Poorest patients were the least likely to be screened
  - 40% of people of color who identified an HCV related risk factor were not tested for HCV
  - Non-Hispanic Black and Asian women were significantly less likely to be tested than their male counterparts
HCV Treatment

- Recommended for all patients with chronic HCV infection (with some exceptions)
- New meds - 1 pill 1x day cure 8-12 weeks
- Medication is expensive
Until very recently, ambivalence about HCV treatment

- Differences from HIV treatment
- Viral clearance - HCV spontaneously clears in 20% of women – why get treated?
- Latency - HCV may remain dormant for 10-30 years
- Legacy effects -
  - Old treatment = ugly side effects – (Interferon and pegylated interferon)
  - Treatment lasted 6-9 months
  - Side effects of treatment were often worse than disease symptoms
Over 35% of those with chronic HCV infection are women

- 19% of new diagnoses are women but double that percentage have chronic medical disease
- Among people who are long term injection drug users, 90% are estimated to be infected with HCV
Transmission of HCV and HIV compared

- HCV less sensitive to light, temperature changes than HIV….
- HCV can hang out on objects
- If introduced to blood, or mucous membranes (nasal inhalation)
- Blood and works transmission (cotton balls, spoons as host, etc)…
- Sexual transmission rare*
- *Although uptake in some MSM associated with polydrug use and unprotected sex
- Persons already infected with HIV more susceptible to HCV infection….
HIV Viral Load Suppression

- Viral suppression is key for people living with HIV
- Consistently taking HIV meds:
  - VL suppression
  - Allows people to live normal lifespans
  - Greatly reduces their chances of transmitting the virus
  - Although progress has been made, only 30% of all people living with HIV have achieved VL suppression
- When people receive consistent HIV medical care, 76% of people achieve VLS = getting and keeping people in HIV medical care saves lives
- Which brings us back to the Women of Color Study
HIV+ Women of Color SPNS Initiative Demonstration Sites

- CORE, Chicago, IL
- New North Citizens Council Inc., Springfield, MA
- SUNY Downstate Brooklyn, NY
- CHS, Bridgeton, NJ
- The Guide to Healing, Chapel Hill, NC
- SYNC+ SWIM, Augusta, GA
- CARE, Miami, FL
- JWCH Institute, Inc., Los Angeles, CA
- SHRT, Longview, TX
- HSC, Hobson City, AL
- HEART, San Antonio, TX
Methods

- Prospective intervention study on a convenience sample of women who were reachable
- Enrolled HIV+ women of color between November 2010-July 2013 who were not currently receiving HIV care and were:

  1) Newly diagnosed with HIV, never been in care
  2) Previously diagnosed, never been in care
  3) Previously in care but changed care provider
  4) Sporadic care – last visit within 12 months
  5) Lost to care (out of care > 12 months)
Methods

- Face-to-face interviews were conducted at baseline and 4 follow-up times: 3; 6; 12; and 18 months.
- Demographic and extensive health history was collected at baseline.
- HIV clinical care and VL status data were collected at baseline and at all follow up visits.
- Barriers to care, self-assessed health (CDC HRQOL) and aspects of the clinical care team were collected at each follow-up visit.
- Data collection ended in January, 2014.
Research Questions

- What is the co-occurrence of HCV among women who have HIV?
- Are women who have both HIV and HCV more likely to remain in care for at least one year compared to those with just HIV?
- Are women with HIV and HCV more likely to be HIV virally suppressed?
Methods

- **Baseline data**
  - We used interview collected sociodemographic, self-assessed health, and health history between 2010-2013 as participants were enrolled

- **Medical care data**
  - Question about history of HCV diagnosis and HCV treatment

- **Outcome data**
  - Most recent Viral load suppression (yes/no) collected
  - Whether participant returned for 12 month interview as a measure of retention
Enrollment and HCV co-occurrence

- 921 women enrolled at 9 of the 11 sites across the US
- In medical history one of the questions asked was have you ever been told you have hepatitis C?
## Characteristics of Women by Hepatitis C History and HCV Treatment at Baseline

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>History of Hepatitis C (HCV) and Hepatitis C treatment History at Baseline</th>
<th>Total N=910 (100%)</th>
<th>P value*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Had HCV, Never Treated N=65 (7.1%)</td>
<td>Had HCV, Treated N=67 (7.4%)</td>
<td>Never Diagnosed with HCV N=778 (85.5%)</td>
</tr>
<tr>
<td>Age Mean (SD)</td>
<td>45.8 (9.1)</td>
<td>47.0 (9.2)</td>
<td><strong>40.3 (11.8)</strong></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Non-Hispanic</td>
<td>35 (53.8)</td>
<td>44 (65.7)</td>
</tr>
<tr>
<td></td>
<td>Hispanic/Latina</td>
<td>26 (40.0)</td>
<td>17 (25.4)</td>
</tr>
<tr>
<td></td>
<td>Other/multiracial</td>
<td>4 (6.2)</td>
<td>6 (9.0)</td>
</tr>
<tr>
<td>Education</td>
<td>Less than HS</td>
<td>34 (52.3)</td>
<td>35 (52.2)</td>
</tr>
<tr>
<td></td>
<td>HS grad or higher</td>
<td>31 (47.7)</td>
<td>32 (47.8)</td>
</tr>
<tr>
<td>Insurance Status</td>
<td>Any</td>
<td>42 (65.6)</td>
<td>53 (80.3)</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>22 (34.4)</td>
<td>13 (19.7)</td>
</tr>
<tr>
<td>Housing Status</td>
<td>Stable</td>
<td>31 (48.4)</td>
<td><strong>41 (61.2)</strong></td>
</tr>
<tr>
<td></td>
<td>Unstable/Institution</td>
<td>33 (51.6)</td>
<td>26 (38.8)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>Working (PT/FT)</td>
<td>2 (3.1)</td>
<td>9 (13.4)</td>
</tr>
<tr>
<td></td>
<td>Not working/disabled/other</td>
<td>63 (96.9)</td>
<td>58 (86.6)</td>
</tr>
</tbody>
</table>
### HIV Medical Care Status of Women at Baseline and HCV History at Baseline

<table>
<thead>
<tr>
<th>HIV Care Status</th>
<th>History of Hepatitis C (HCV) and Hepatitis C treatment History at Baseline</th>
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<td>Had HCV, Never Treated N=65 (7.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Had HCV, Treated</td>
<td>8 (12.3)</td>
<td>171 (18.8)</td>
<td>.071</td>
</tr>
<tr>
<td>Never Diagnosed with HCV N=778 (85.5%)</td>
<td>5 (7.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New to HIV Medical Care</td>
<td>9 (13.8)</td>
<td>131 (14.4)</td>
<td></td>
</tr>
<tr>
<td>Transferred to Care</td>
<td>14 (21.5)</td>
<td>211 (23.2)</td>
<td></td>
</tr>
<tr>
<td>Sporadic Care</td>
<td>17 (26.2)</td>
<td>239 (26.3)</td>
<td></td>
</tr>
<tr>
<td>Lost to Care</td>
<td>17 (26.2)</td>
<td>157 (17.3)</td>
<td></td>
</tr>
</tbody>
</table>
## Self-Assessed Health Status of Women at Baseline

<table>
<thead>
<tr>
<th>Health Status</th>
<th>History of Hepatitis C (HCV) and Hepatitis C treatment History at Baseline</th>
<th>Total N=910 (100%)</th>
<th>P value*</th>
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<td>Never Diagnosed with HCV N=778 (85.5%)</td>
</tr>
<tr>
<td>Health is</td>
<td>Excellent 3 (4.5) 2 (3.0) 83 (10.7)</td>
<td>88 (9.7)</td>
<td>.095</td>
</tr>
<tr>
<td></td>
<td>Very Good 8 (12.3) 6 (9.1) 114 (14.7)</td>
<td>129 (14.1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good 18 (27.6) 22 (33.3) 257 (33.1)</td>
<td>297 (32.7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair 26 (40.0) 29 (43.9) 235 (303)</td>
<td>290 (32.0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor 10 (15.4) 7 (10.6) 87 (11.2)</td>
<td>104 (11.5)</td>
<td></td>
</tr>
</tbody>
</table>
## Risks for HCV and Other Adverse Health Outcomes

<table>
<thead>
<tr>
<th>Risk – reported yes</th>
<th>History of Hepatitis C (HCV) and Hepatitis C treatment History at Baseline</th>
<th>Total N=910 (100%)</th>
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<tbody>
<tr>
<td></td>
<td>Had HCV, Never Treated N=65 (7.1%)</td>
<td>105 (11.6)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Had HCV, Treated N=67 (7.4%)</td>
<td>106 (11.7)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Never Diagnosed with HCV N=778 (85.5%)</td>
<td>155 (19.4)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Fear of being reported for use of drugs</td>
<td>18 (27.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injected drugs last 3 months</td>
<td>37 (56.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Had sex with an IDU last 3 months</td>
<td>38 (65.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Had sex for money last 3 months</td>
<td>38 (65.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Used condoms for last 3 months</td>
<td>59 (90.8)</td>
<td></td>
<td>.201</td>
</tr>
<tr>
<td>Alcohol use last 3 months</td>
<td>56 (86.2)</td>
<td></td>
<td>.093</td>
</tr>
</tbody>
</table>
## HIV and HCV and VL and Retention in HIV Medical Care at 12 Months

<table>
<thead>
<tr>
<th>Risk</th>
<th>History of Hepatitis C (HCV) and Hepatitis C treatment History at Baseline</th>
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<td>Never Diagnosed with HCV N=778 (85.5%)</td>
</tr>
<tr>
<td>Retained in Care 12 mos</td>
<td>Yes</td>
<td>42 (85.7)</td>
<td>40 (78.4)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>7 (14.3)</td>
<td>11 (21.6)</td>
</tr>
<tr>
<td>Viral Load Suppression</td>
<td>Yes</td>
<td>28 (59.6)</td>
<td>33 (68.8)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>19 (40.4)</td>
<td>15 (31.3)</td>
</tr>
</tbody>
</table>
We examined all the significant variables together, controlling for the location of where women were enrolled.

- Have you ever been told you have HCV?
  - Mattered positively: Older age and past IDU
- Have you ever been treated for HCV (yes/no) –
  - Nothing mattered=No differences
What do we take away from these findings?

- Injection drug use is associated with HCV
- Having sex with someone who injects drugs is associated with HCV*
- That only 15% of 910 women had been told that they were positive for HCV may mean that we had:
  - Unusual sample
  - CDC HCV screening recommendations for those born 1945-1965 were released in 2012 so not yet standard of care
  - Participants under-reported HCV (social desirability)
  - Women of color with HCV risk factors were screened at low levels
- Re-testing for HCV on some regular basis is important
Since the end of 2014, HCV treatment has changed dramatically

- On the good side, new medications treat HCV more quickly and effectively with fewer side effects
- Several new drugs have been introduced in the past two years
- June, 2016 FDA approved Epclusa (Gilead). 12 week course $74,760. Treats all six strains of HCV.
- In New York, ADAP will pay for at least some HCV medications – but not the ones that cost $1000/day.
- NY- all insurers now willing to pay-regardless of fibrosis or HIV status
THANK YOU to all the people who were involved with POWER and to the women who were empowered:

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- Interfaith Medical Center
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