Do drug users know their infection status?

Concordance between self-reported and measured HIV & HCV infection status among PWID in Germany

Nielsen S¹, Gassowski M¹, Wenz B¹, Bannert N², Bock CT³, Kürcher C², Ross RS², Hamouda O¹, Bremer V¹, Marcus U¹ and Zimmermann R¹

Background

People who inject drugs (PWID) are disproportionately affected by both HIV and hepatitis C (HCV) infection. Awareness of infection status is essential to ensure linkage to appropriate healthcare for those infected as well as for uninfected individuals who need access to targeted testing and counselling services. Awareness of infection status may also lead to reduced transmission.

Aim: To compare self-reported HIV and HCV status with serological and molecular markers of infection among PWID.

Results

Characteristics of participants: (range in the 8 study cities)

- Median age: 29-41 years
- 19-35% women
- 76-88% injecting in the last 30 days
- 77-95% saw a doctor in the last year
- 37-74% were currently in opioid substitution therapy (OST)
- Median age: 29-41 years
- 19-35% women
- 76-88% injecting in the last 30 days
- 77-95% saw a doctor in the last year
- 37-74% were currently in opioid substitution therapy (OST)

Table 1: Comparison of self-reported and measured HIV and HCV status

<table>
<thead>
<tr>
<th>Self-reported status</th>
<th>HIV laboratory test results N = 2076*</th>
<th>HCV laboratory test results N = 2030**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIV negative (AB-)</td>
<td>HIV positive (AB+)</td>
</tr>
<tr>
<td>Concordant</td>
<td>1784 (90%)</td>
<td>81 (81%)</td>
</tr>
<tr>
<td>Discordant</td>
<td>6 (0,3%)</td>
<td>16 (16%)</td>
</tr>
<tr>
<td>Never tested</td>
<td>133 (7%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Unclear *</td>
<td>52 (3%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Answer declined</td>
<td>1 (0,1%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Total</td>
<td>1976 (100%)</td>
<td>100 (100%)</td>
</tr>
<tr>
<td></td>
<td>Unexposed (AB-, RNA-)</td>
<td>Chronic infection (AB+, RNA+)</td>
</tr>
<tr>
<td></td>
<td>339 (47%)</td>
<td>174 (38%)</td>
</tr>
<tr>
<td></td>
<td>194 (27%)</td>
<td>254 (56%)</td>
</tr>
<tr>
<td></td>
<td>113 (16%)</td>
<td>15 (3%)</td>
</tr>
<tr>
<td></td>
<td>69 (10%)</td>
<td>14 (3%)</td>
</tr>
<tr>
<td></td>
<td>1 (0,1%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td></td>
<td>716 (100%)</td>
<td>457 (100%)</td>
</tr>
</tbody>
</table>

* excluding one case with indeterminate HIV status
* excluding 47 cases with acute infection

In our study, 17% of HIV positive PWID and 27% of those with chronic HCV infection were unaware of their infections indicating that the majority was aware of their infections.

However, more than ¼ with infectious HCV and nearly one-fifth of HIV infected PWID did not know their status, although often attached to OST or other harm reduction services.

Chart 1: Laboratory test results, n=2077

- HIV positive
  - 4.8%
- HCV chronic
  - 41%
- HCV acute
  - 2%
- HCV cleared infection
  - 22%
- HCV unexposed
  - 34%

Access to appropriate testing, counselling and treatment targeted to the needs of PWID should be further improved, particularly for HCV.

In the era of highly effective antiviral HCV-treatment options, the opportunity to clear infections exists, if infected persons become aware of their infection and are linked to appropriate care settings.

Conclusion

Contact information and disclosure statement:
For more information: Email: stine.nielsen12@gmail.com. Twitter: @StineNielsenEPI. Web: www.rki.de/druck-studie

These results have been accepted for publication in the BMC Hepatology, Medicine and Policy journal.

The study was funded by the Robert Koch Institute and the German Ministry of Health. All authors declare no conflict of interest.

References:

Author affiliations: ¹ Department for Infectious Disease Epidemiology, Division for HIV/AIDS, STI and Blood-borne Infections, Robert Koch Institute. ² Department for Infectious Diseases, Division for HIV and other Retroviruses, Robert Koch Institute. ³ Department for Infectious Diseases, Division for Viral Gastroenteritis and Hepatitis Pathogens and Enteroviruses, Robert Koch Institute. 4 Institute of Virology, National Reference Centre for Hepatitis C, University Hospital Essen, University of Duisburg-Essen, Essen, Germany.

5th International Symposium on Hepatitis Care in Substance Users (INHSU) • 7-9 September 2016