High burden of blood-borne and sexually transmitted infections among people experiencing homelessness – First results from a pilot study in Berlin, Germany

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Background I

- More than 400,000 people in Germany are affected by homelessness in 2018, and the trend is rising

- People experiencing homelessness
  - Are affected by poverty and social exclusion
  - Lacking of basic needs such as secure housing, food, clothing and hygiene
  - Are living in the precarious living conditions with associated risk factors (e.g. drug/alcohol use, sexual risk behaviour, imprisonment)
  - Lacking of health insurance coverage and other reasons such as stigmatisation or language barriers leads to inappropriate medical care

  ➔ Leading to high vulnerability to HCV, HBV, HIV, Syphilis and other STIs
Background II

- Testing and prevention services for HIV, HBV, HCV, Syphilis/STI are available in the field of addiction service or MSM test projects.
- No testing and prevention service addresses the needs of PEH.
- No data on infectious diseases among homeless people in Germany.
Study setting

**Data collection:** May - June 2021

**Inclusion criteria:** >18 Jahre

**Study objective:** Prevalence study on sexually or blood-borne infections among homeless people in Germany

**Funding:** Berlin State Office for Health (LaGeSo), Paritätischer Wohlfahrtsverband Berlin, Robert Koch Institute Berlin

5 centers for PEH with basic medical care in Berlin
Study design

86 questions:
- Demographics
- Behavior
- Health Issues

Serology:
- Syphilis
- HIV: HIV-Ab
- HCV: HCV-Ab
- HBV: HBsAg, HBs-Ab, HBC-Ab
- Tuberculosis: TB-IGRA
- SARS-CoV2: Ab, IGRA

NAAT
- Chlamydia trachomatis
- Neisseria gonorrhoea

Venous blood sample

Urin sample

Physical examination

Oureach and enrolling

Questionnaire-based interviews
216 participants were included in the analysis.

- Mean age 41 (range: 19-68)
- 88.4% (191/216) were male
- 54.5% (116/213) origin from Eastern Europe (EU)
- 60.8% (129/212) experience homelessness less than 3yrs
- 50.5% (109/216) were rough sleeper.
- 56.9% (123/216) had no health insurance.
Consumption, imprisonment and sexual behaviour

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<tbody>
<tr>
<td>drug use ever in live</td>
<td>72%</td>
<td>154/215</td>
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<td>IV drug use past 30 days</td>
<td>47%</td>
<td>102/216</td>
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<td>imprisonment at least once</td>
<td>71%</td>
<td>153/214</td>
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<td>tattoos made in non-professional settings</td>
<td>48%</td>
<td>101/210</td>
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<td>sexually active past 12 month</td>
<td>58%</td>
<td>122/210</td>
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Bloodborne and sexually transmitted Infections

Prevalence of infections

- HBV-RNA positive: 2%
- HCV-RNA positive: 16%
- HIV-Ab positive: 3%
- active STI: 6%

Prevalence in the general population in Germany:
- 0.3%
- 0.2%
- 0.1%

Prevalence of infections with hepatitis B (HBV, n = 212), hepatitis C (HCV, n = 213), human immunodeficiency viruses (HIV, n = 213) and bacterial sexually transmitted infections (STI, syphilis (n = 213), Chlamydia trachomatis (n = 198), Neisseria gonorrhoeae (n = 198)).
Conclusion

► High burden of blood borne and sexually transmitted infectious disease among PEH
► There is a need to improve awareness and access to treatment and care for this population group
► Networking between addiction, homelessness and infectious diseases services need to be strengthened.
► HCV prevention and elimination efforts must be supported and strengthened for this population group
► Furthermore, we propose to extend the study to other cities in Germany to verify the results.
Acknowledgement

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