High prevalence of current and past hepatitis C virus infections among new injectors found in a cross-sectional study in Germany, 2011-2014: Missed opportunities for counselling and testing

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Background

- In Germany, risk for hepatitis C virus (HCV) infection is highest among people who inject drugs (PWID)
- New injectors are particularly vulnerable for HCV-acquisition

The aim was to describe characteristics of new injectors and identify opportunities for HCV- testing

Methods: cross sectional study

- Cross-sectional study among PWID in 8 German cities, 2011-2014 (Figure 1)
- Recruited via respondent driven sampling
- Questionnaire-based face-to-face interviews: sociodemographic characteristic, HCV-testing, access to medical care
- Testing of capillary blood for HCV: Detection of HCV antibody and/or HCV-RNA was considered HCV positive
- Participants with injection drug use <5 years were defined as new injectors & ≥ 5 years as longterm injectors
- X^2-tests were used to compare groups

Figure 1: Study cities

Results I: HCV status of new versus longterm injectors

- 2,077 participants: 232 of 2,059 participants (11%) with known duration of injection drug use were new injectors
- Prevalence of HCV positivity increased with duration of injection drug use (Figure 2)
- New injectors were less likely to have been HCV- tested & to be aware of their HCV positivity (Table 1)

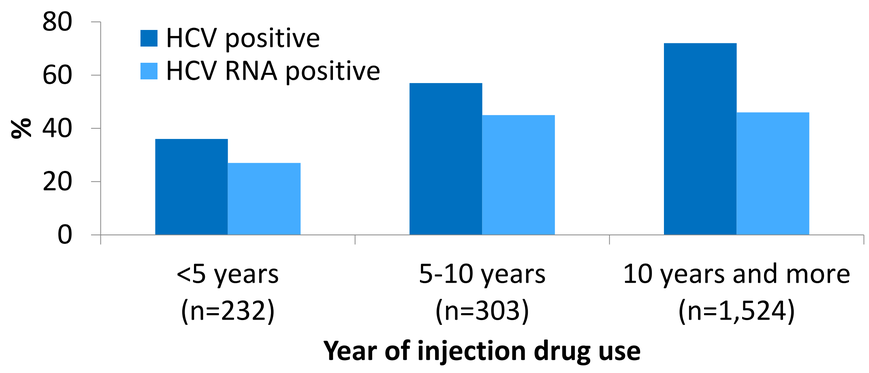

Figure 2: HCV prevalence by duration of injection drug use

Table 1: HCV-status, awareness and testing experience according to duration of injection drug use

	New injectors (n=232)		Longterm injectors (n=1,827)		P-value
	n	%	n	%	
HCV positive	83/232	36%	1,270/1,827	70%	**<0.0001**
Detectable HCV-RNA	63/232	27%	836/1,827	46%	**<0.0001**
If HCV-positive: Unaware of HCV-positive status	33/81	41%	157/1,248	13%	**<0.0001**
Among unaware: proportion with HCV-RNA+	28/33	85%	111/157	71%	0.095
Never tested for HCV	56/209	27%	113/1,766	6.4%	**<0.0001**

Results II: Missed opportunities for HCV testing among new injectors

Table 2: HCV-status, awareness and care seeking behavior of new injectors by self-reported HCV-testing experience prior to study

New injectors: reported previous HCV-test?

	YES (n=153)		NO (n=56)		P-value
	n	%	n	%	
HCV positive	64	42%	16	29%	**0.08**
Detectable HCV-RNA	47	31%	14	25%	0.4
If HCV-positive: Unaware of HCV-positive status	14/62	23%	16	100%	**<0.0001**
Ever in inpatient detoxification	102	67%	26	46%	**0.008**
Ever in outpatient substitution therapy	101	66%	15	27%	**<0.0001**
Currently in outpatient substitution therapy	52	34%	10	18%	**0.02**
No access to medical care within 12 months	26	17%	12	21%	0.5
Low threshold drug services in the last 30 days*	77/88	88%	21/28	75%	0.1
If accessed medical care in last 12 months: Last access point	**n=124**		**n=43**		
Hospital	25	20%	17	40%	**0.012**
Practice without addiction services	37	30%	16	37%	0.4
OST services	44	35%	6	14%	**0.008**
Detention facilities (prison hospital)	11	8.9%	1	2.3%	0.15

*not asked in study cities Berlin, Essen, Leipzig

Opioid substitution therapy (OST) was:

- Ever received by 54% of new injectors
- Currently received by 29% of new injectors

New injectors without previous HCV-testing:

- Had often visited low-threshold drug services
- Had often accessed addiction services
- Last access points for medical care:
  - More commonly hospitals and practices without OST
  - Less commonly practices offering OST (Table 2)

NI previously tested for HCV

Top 5 mentioned HCV test-stites:

1. OST-services (35%, n=45)
2. Hospitals (33%, 43%)
3. Practices without addiction services (14%, n=18)
4. Low threshold drug services (8.5%, n=11)
5. Prisons (8.5%, n=11)

Limitations

- Sample might not be representative for all new injectors in Germany and due to small numbers results have to be interpreted with caution.
- Test experience was self- reported: we can't exclude testing without knowledge of participants and incorrect recall.
- Reasons for non-testing were not explored.

Conclusions and recommendations

- We found **high HCV-positivity and low HCV-status awareness among new injectors.**
- To increase early diagnosis and treatment regular HCV-counselling and testing should be offered in all facilities where new injectors can be reached:
  Including: OST-services, low-threshold drug services, hospitals, practices without addiction services and prisons.