

Factors associated with hepatitis C testing uptake among people who inject image & performance enhancing drugs.

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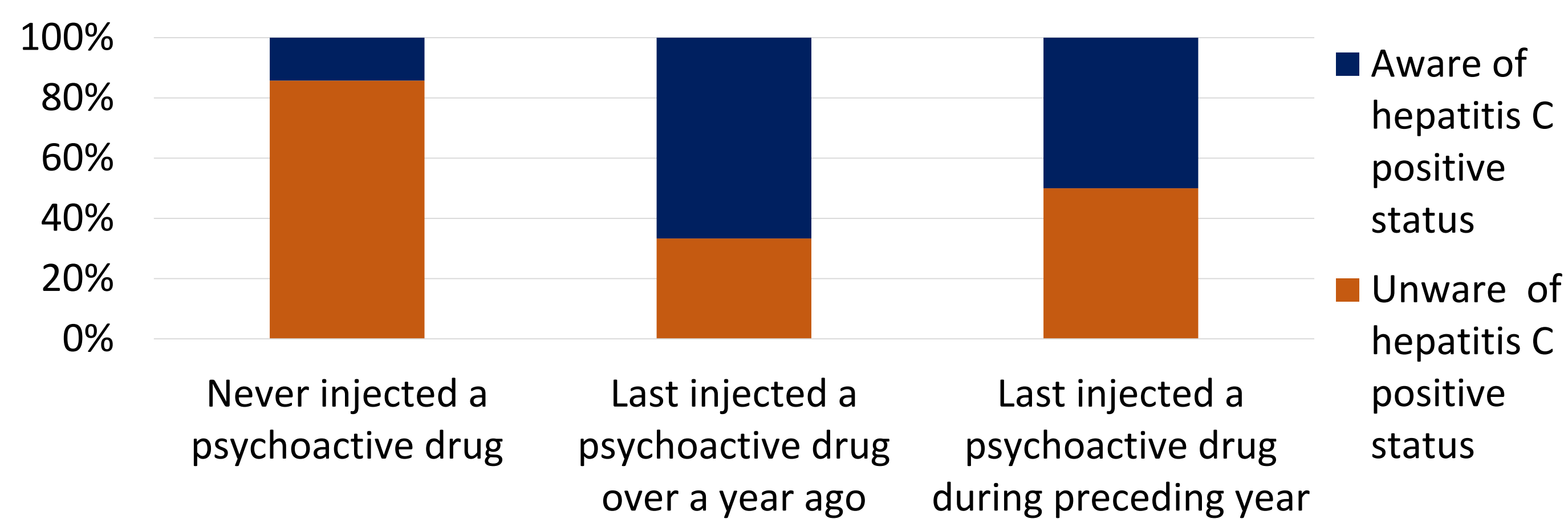
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Introduction

- People who inject image and performance enhancing drugs (IPEDs) had been perceived as not being at high risk of hepatitis C virus infection¹.
- Recent studies indicate the prevalence of antibodies to hepatitis C in this group is about 10-times that in the general population^{2,3,4}.

Hepatitis C among people injecting IPEDs, UK.	
Study period, all England & Wales	Prevalence of antibodies to hepatitis C
2010-2011	5% (20/395) ²
1998-2013	4% (42/1,083) ³
2012-2015	5% (27/564) ⁴

- Studies indicate alcohol consumption is high among those using IPEDs and the majority use C17 alpha alkylated steroids – both these can cause, or increase risk of, damage to the liver.
- Worryingly, the majority of hepatitis C virus infections among those injecting IPEDs remain undiagnosed⁴.



- We examined hepatitis C virus testing uptake using survey data.

Method



- People who had injected IPEDs across England, Scotland & Wales were surveyed during 2016 (<http://ipedinfo.co.uk>).
- They were recruited from **community settings, needle & syringe programmes and online**. Those who agreed to participate self-completed a behavioural questionnaire.

- Factors associated with ever being tested for hepatitis C virus (self-reports) were examined using multivariable analysis.
- Potential missed testing opportunities were also explored by examining patterns of health service use.

Limitations

- Self-reported data (for uptake of hepatitis C testing and year of the last test) may be subject to recall bias, though studies of people who inject drugs indicate that self-reports are reliable.
- Due to limited data on the size and nature of this population, we are currently unable to assess the representativeness of those recruited.
- Considering these issues, our findings need to be generalised with caution.

The sample

There were **580 participants**: their median age was 31 years; 97% were men; 4.4% identifying as lesbian, gay or bisexual (LGB); 17% had ever been imprisoned; and 4% of them were recruited through NSP and other services.

Key Points & Conclusions

- Two-thirds of those injecting IPEDs in this United Kingdom study had **never** been tested for hepatitis C infection. Testing for hepatitis C was associated with other risks; particularly the injection of psychoactive drugs and imprisonment. Half of those **not** tested had recently been in contact with a health service.
- Those recruited through services, principally needle & syringe programmes, were three times more likely to have been tested. Previous studies of people who inject IPEDs have focused recruitment on needle & syringe programmes, potentially over-estimating hepatitis C virus testing uptake and the proportion aware of their hepatitis C virus status.
- Targeted hepatitis C virus testing interventions are needed for those injecting IPEDs. Approaches to increasing testing uptake will need to reach those **not** using needle & syringe programmes, and those **without** a history of psychoactive drug injection or imprisonment.
- Further research is needed to inform intervention development and the best approaches for targeting interventions.

References:

1. Human Enhancement Drugs: The Emerging Challenges to Public Health. Evans-Brown *et al.* Liverpool, United Kingdom: North West Public Health Observatory; 2012. ISBN: 978-1-908929-01-3

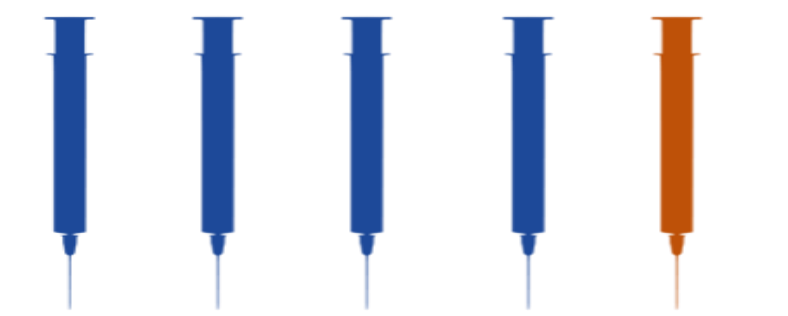
2. Prevalence of, and risk factors for, HIV, hepatitis B and C infections among men who inject image and performance enhancing drugs: a cross-sectional study. Hope *et al* *BMJ Open*. 2013 Sep 12;3(9):e003207.

3. Risk of HIV and Hepatitis B & C Over Time Among Men Who Inject Image & Performance Enhancing Drugs in England and Wales: Results From Cross-Sectional Prevalence Surveys, 1992-2013. Hope, *et al* *J Acquir Immune Defic Syndr*.2016;71:331-7.

4. Low levels of hepatitis C diagnosis and testing uptake among people who inject image and performance enhancing drugs in England and Wales, 2012-15. Hope, *et al* *Drug Alcohol Depend*. 2017;179:83-86.

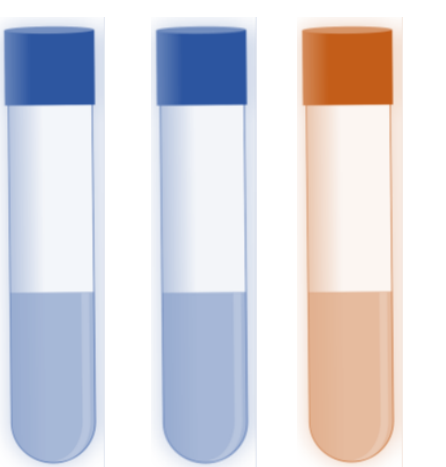
Their infection risks

- **14%** had ever **shared a drugs vial** (10% of those NSP recruited vs. 16% of those community recruited, $p=0.084$).
- **18%** had ever **reused their own needle-syringe** (did not differ by recruitment setting).
- **2%** had ever knowingly **used someone else's needle-syringe** (did not differ by recruitment setting).
- 89% were sexually active; 47% of those with 2+ partners had never or only occasionally used condoms during past 12 months.
- **5.7%** had ever **injected a psychoactive drug**.



Uptake of hepatitis C testing

- A **third** (31%) had ever been **tested for hepatitis C**, and those tested were older (mean of 34 years vs. 32 years; $p=0.039$).
- 3.3% of those tested had used someone else's needle-syringe compared with 1.3% of those not tested ($p=0.106$).
- No difference in testing uptake by re-use of own needle-syringe or not, and sharing a vial or not.



Factors associated with hepatitis C testing (multivariable analysis)

	Factor	Tested for HCV	Total	Adjusted Odds ratio	95% CI for Adjusted Odds Ratio
Sexuality	Heterosexual / Not reported	29%	162	552	1.00
	LGB	68%	19	28	5.93
Ever injected a psychoactive drug	No / Not reported	30%	163	547	1.00
	Yes	55%	18	33	2.27
Recruitment setting	In the community / Online	25%	110	440	1.00
	In services	51%	71	140	3.08
Used peptides & associated growth hormones	No / Not reported	23%	65	282	1.00
	Yes	39%	116	298	2.01
Ever imprisoned	No / Not reported	28%	136	479	1.00
	Yes	45%	45	101	2.23

Recency of testing & missed opportunities

For **three-fifths** (60%) of those tested their **most recent test was during 2014-2016**; for 29% it was during 2016 (among those who reported a year of last test).

Of those **never tested**, **50%** had **used a health service** where they could have been tested during the preceding year.

- 41% had used primary care;
- 10% had used NHS walk-in clinic;
- 9.3% had attended an Accident & Emergency department;
- 3.5% had used a sexual health (GUM) clinic.

