Judd, A; Hickman, M; Jones, S; McDonald, T; Parry, JV; Stimson, GV; Hall, AJ; (2005) Incidence of hepatitis C virus and HIV among new injecting drug users in London: prospective cohort study. BMJ. p. 24. ISSN 1468-5833 DOI: https://doi.org/10.1136/bmj.38286.841227.7C

Downloaded from: http://researchonline.lshtm.ac.uk/13936/

DOI: https://doi.org/10.1136/bmj.38286.841227.7C

Usage Guidelines:
Please refer to usage guidelines at http://researchonline.lshtm.ac.uk/policies.html or alternatively contact researchonline@lshtm.ac.uk.

Available under license: Creative Commons Attribution Non-commercial http://creativecommons.org/licenses/by-nc/3.0/
Incidence of hepatitis C virus and HIV among new injecting drug users in London: prospective cohort study

Ali Judd, Matthew Hickman, Steve Jones, Tamara McDonald, John V Parry, Gerry V Stimson, Andrew J Hall

In England, the low prevalence of HIV among injecting drug users during the 1990s was attributed in part to the introduction of harm reduction interventions in the late 1980s. Also, the prevalence of hepatitis C virus in the late 1990s was thought to be relatively low compared with other countries, at around 40% overall and 13% among those who had been injecting drugs for less than six years. We carried out a prospective cohort study of new injecting drug users in London to estimate the incidence of hepatitis C virus and HIV.

Participants, methods, and results

In 2001, we recruited from community settings mainly those who had been injecting drugs for less than six years or fewer. All had injected in the previous four weeks and could provide addresses for follow up. They completed interviewer administered questionnaires and provided oral fluid specimens and optionally for six years or fewer. All had injected in the previous four weeks with needles and syringes used by someone else, and 53% sharing injecting paraphernalia. The baseline prevalence of antibody to hepatitis C virus was 44% and of antibody to HIV was 4% (table). They were followed up 12 months later. We calculated incidence using standard person time methods.

Most of the participants (91%) were recruited in London. The mean (SD) age was 27.4 (5.3) years, and 29% of the participants were women. Three fifths (61%) of the sample at baseline had been injecting for less than four years, and the median frequency of injecting was 2.5 times a day. Most (71%) mainly injected opiates, although just over half (53%) had injected cocaine or crack in the previous year. Participants reported high levels of injecting risk behaviour, with 24% at baseline reporting injecting in the previous four weeks with needles and syringes used by someone else, and 53% sharing injecting paraphernalia. The baseline prevalence of antibody to hepatitis C virus was 44% and of antibody to HIV was 4% (table).

The overall follow up rate was 70%, and we found no difference between those followed up and those lost to follow up for sociodemographic characteristics or injecting risk behaviour. The incidence of antibody to hepatitis C virus was 41.8 cases per 100 person years and of antibody to HIV was 3.4 cases per 100 person years (see table).

Comment

The incidence of hepatitis C virus in England is high and of HIV higher than expected. These findings are corroborated by ongoing surveillance data, and suggest that transmission may have recently increased. Infecting drug users in London have a higher incidence of hepatitis C virus than those in many cities worldwide, and an incidence of HIV comparable to that among men who have sex with men attending clinics for sexually transmitted infection in London. Possible explanations for the rising incidence include changes in patterns of injecting drug use, with greater injection of crack and injecting risk behaviour in newer injecting drug users than in those injecting in the early to mid-1990s. In addition there may have been increases in the size of the population of injecting drug users over and above any increase in protective interventions. Recent estimates suggest that current...
Prevalence and incidence of hepatitis C virus and HIV antibody among new injecting drug users in London, 2001-3

<table>
<thead>
<tr>
<th>Viral antibodies</th>
<th>No of seroconversions/total (mean follow up time)</th>
<th>Incidence rate per 100 person years</th>
</tr>
</thead>
<tbody>
<tr>
<td>No positive/total</td>
<td>Prevalence (95% CI)</td>
<td>baseline</td>
</tr>
<tr>
<td>Hepatitis C virus</td>
<td>18/428</td>
<td>43.7 (38.8 to 48.5)</td>
</tr>
<tr>
<td>HIV</td>
<td>18/428</td>
<td>4.2 (2.5 to 6.6)</td>
</tr>
</tbody>
</table>

Contributors: AJ, MH, SJ, JP, GVS, and AJH designed and conducted the cohort study. TMcD conducted the laboratory testing, overseen by JVP. AJ undertook the statistical analysis; she is guarantor for the paper. All authors contributed to the writing of the paper.

Funding: Policy research programme of the Department of Health. The views expressed are those of the authors and not necessarily those of the Department of Health. The funding source had minor involvement in the study design, through attendance at steering group meetings.

Competing interests: None declared.

Ethical approval: This study received ethical approval from Hammersmith, Queen Charlotte’s and Chelsea and Acton Hospitals research ethics committee.


(Accepted 7 September 2004)

Averting a change to the date of the royal succession

I will be 90 years old in 2005 and have a very clear memory of an episode which took place at my home in Mansfield in 1926 when I was 11. My father, H L Flint, was a general practitioner but was much involved with cardiology. We understood (rightly or wrongly) that he was the first person in the Midlands able to take electrocardiographs. One fair-sized room in our house was his surgery. (Panel patients had a scruffy place in the town.) The electrocardiograph took up nearly the whole length of one wall. The patient sat with both feet and arms in saline baths and was wired up to the machine. Moreover, wires were run through our house and garden, over a high wall, through a neighbour’s garden, and so to the General Hospital, which stood high above us, to enable hospital patients to be wired up there, too.

At that time, the then Prince of Wales kept his hunters at Melton Mowbray (about 35 miles away). His vet was worried about the health of the Prince’s favourite hunter, “Tarzan.” He had heard of my father and asked whether it would be possible to take an ECG of Tarzan. After consideration my father decided to have a try. In due course, the horse arrived with the vet, groom, and an equerry, in a large horsebox. When this was arranged, my mother promptly decided to go and stay with her mother, so we still have the details in a letter I wrote, telling my mother all about it.

My two brothers were much younger than I so never appeared from the nursery, where they watched the proceedings through the window. One brother, now a retired consultant physician, told me that when he started medical school cardiologicals of this size were still in use.

My father was a very cautious man. In those days, any medical man who advertised was liable to be struck off the register. Needless to say, the local press got wind of the affair and photographers waited outside for ages and took photos of Tarzan with me included, but fortunately without my father.

My two brothers were much younger than I so never appeared from the nursery, where they watched the proceedings through the window. One brother, now a retired consultant physician, told me that when he started medical school cardiologicals of this size were still in use.

It is interesting to speculate that, had this ECG not been taken, the Prince of Wales might have suffered a fatal accident while riding Tarzan to hounds, and the affair with Mrs Simpson and the resulting abdication would never have taken place.

Margaret Hope Robinson submitted by J G Strong, consultant physician, Royal Glamorgan Hospital, Llantristant CF72 8XR, Bletchley, Derbyshire