

Injecting heroin user : How long until a Hepatitis C infection is acquired?

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INTRODUCTION

Newly acquired Hepatitis C virus (HCV) infections in Scotland are predominantly within people who inject drugs (PWID). While active drug use itself does not negatively impact on HCV treatment outcomes, the challenge remains in encouraging this high risk patient group to attend for regular screening.

AIM

Normalise HCV testing within high risk groups of PWID via dry blood spot (DBS) method. Providing regular HCV testing can lead to early diagnosis and therefore the expected benefits that early treatment can have on onward transmission rates.

METHODS

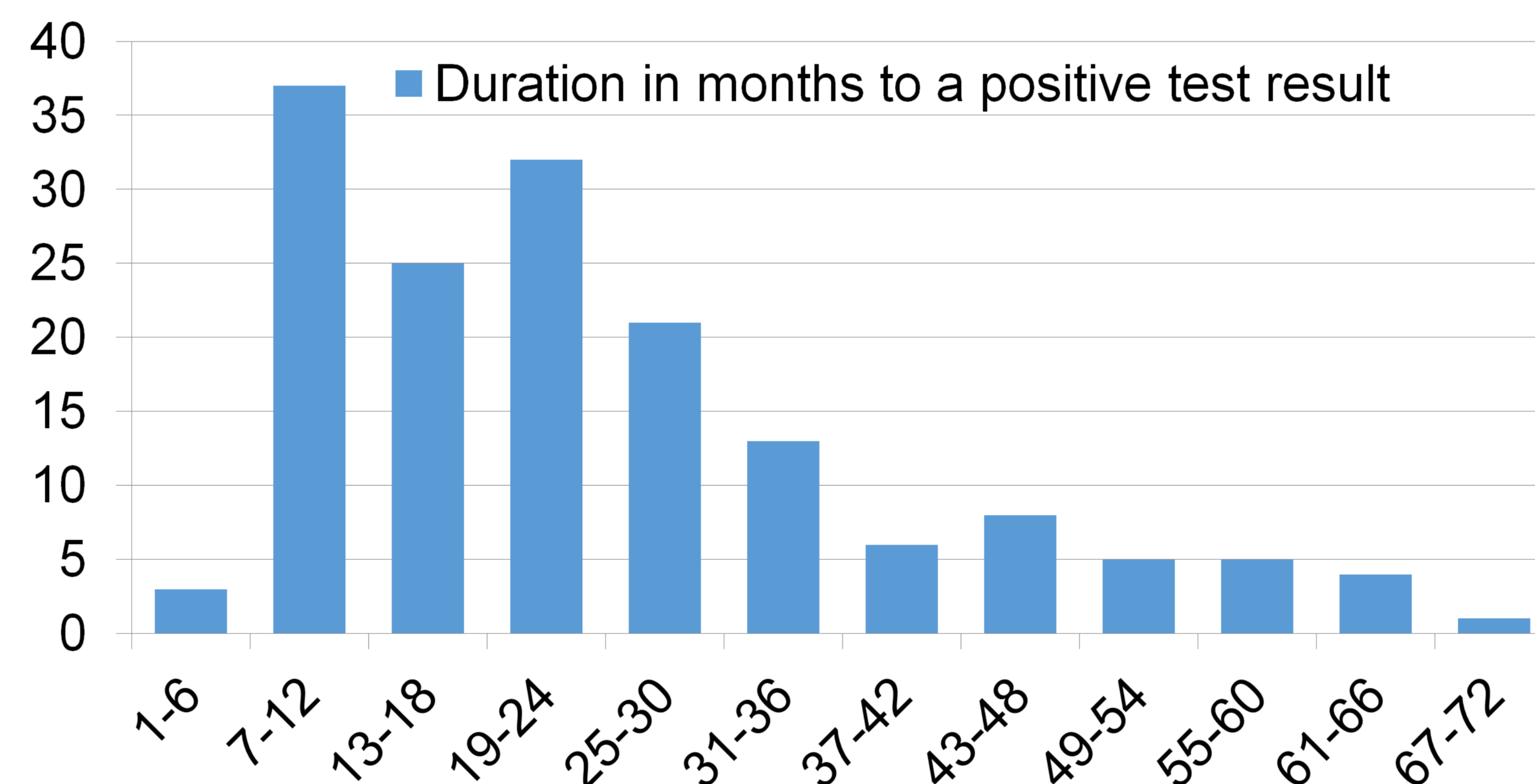
- Offer regular DBS testing to active PWID in drug treatment / Harm reduction services.
- All patients with negative HCV results are encouraged to return for repeat testing on a yearly basis.
- Record those who are identified as recent infections following a previous negative result and record the duration to seroconversion.

RESULTS

A total of 1866 individuals – where the risk was identified as intravenous heroin use have been tested since DBS testing was initiated in 2009.

25% were found to be HCV positive at the time of their first test.

The following graph demonstrates the time period between the most recent negative result to a subsequent new HCV diagnosis for each individual.



RESULTS (CONTINUED)

The proportion of individuals returning for repeated testing has remained considerable throughout the time period, with consistent proportions of those tested now identified as HCV positive (as shown in Table 1.)

Test number	Proportion of previous HCV negative patients returned	New HCV infections	Percentage tested within 36 months
2nd	41.3%	18.9%	77%
3rd	44.8%	16.2%	88%
4th	42%	16.2%	100%
5th	38.7%	12.5%	100%
6th	38%	25%	100%

Table 1.

CONCLUSIONS

DBS testing is widely accepted within populations with a high risk of acquiring HCV infections through their intravenous drug use. 160/578 (27.7%) of those patients initially tested as HCV negative were subsequently found to have acquired a recent HCV infection over a varying time period due to their continued drug use. This highlights the need for repeat testing provisions as well as treatment for HCV in high risk PWID – if only to minimise the future disease burden should infection in this population remain undiagnosed.