Prevention, testing, care and treatment in people who inject drugs.

Not hard to reach, easy to ignore

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HCV epidemiology

- Total global prevalence - RNA positive - 1.1% ~ 80 million viraemic infections
- Between 1990 and 2013, global viral hepatitis deaths increased (0.89 million to 1.45 million)
- Years of life lost and years lived with disability also increased
Prevalence of HCV among persons who inject drugs

Estimated 67% of people who inject drugs having been infected with HCV.

Considerable optimism with the advent of DAAs

Simpler, safer and more effective

Elimination has become achievable
WHO targets for reducing new infections and stopping deaths

- **New Infections**: 30% reduction by 2020, 90% reduction by 2030
- **Deaths**: 10% reduction by 2020, 65% reduction by 2030
Achieving the 2030 targets

Diagnosis
• 90% of chronic infections diagnosed

Treatment
• 80% of eligible persons with chronic HCV treated

Harm reduction
• Number of sterile needles and syringes provided per person who injects drugs per year - increase from 20 to 300. Estimated to be 75% coverage
• I can’t see a specific number for increasing coverage for opioid substitution therapy
Treatment is now affordable
Treatment access globally – many countries have restrictions on treating PWID
76% (n=26) of countries had no drug or alcohol use restrictions.
United States
Achieving both targets:
Total cost $7.1B (95%CI 6.8—7.9B)
ICER $25,120 (95%CI 11—39k)
Australia

- Available through PBS from 1 March 2016
  - Available to everyone regardless of level of fibrosis or how you became infected or whether you currently inject drugs
  - Treatment available in tertiary hospital, community settings and prisons
But it is not just treatment – we need a multipronged approach
Prevention – high quality harm reduction
Current care cascade

Fig. 8. Cascade of care for HCV infection, by WHO region, 2015

Source: WHO estimates, conducted by the Center for Disease Analysis. See Annex 2.
Regular testing is required

![Annual HCV incidence graph]

- Treatment scale-up only
- Treatment + rapid RNA + annual testing of PWID in OST
- Treatment + rapid RNA
- WHO target (80% reduction)
Need better evidence as to what works and cost effectiveness of the various approaches
Rapid EC – point of care pilot

Visit 1
- Consent and pre-test counselling
- OraQuick Ab test
- OraQuick Ab result
- Xpert HCV RNA test and standard HCV Ab and HCV RNA and standard-of-care bloods
- Xpert RNA result

Visit 2
- Post-test counselling
- Review of all results
- Treatment work up and referral if RNA positive
- Questionnaire 2

Negative result

Participant can choose to stay for result or receive result in text message

Standard HCV Ab and HCV RNA test
Counselling about negative result and harm reduction
Questionnaire 2
Treatment - no one “best” model of care
Measures of fibrosis

• APRI
• Fibroscan - transient elastography
• Fibrotest
• FIB-4

\[ \text{FIB-4} = \frac{\text{Age (years)} \times \text{AST (U/L)}}{\text{Platelet Count (10^9/L)} \times \sqrt{\text{ALT (U/L)}}} \]
The role of the injecting network on hepatitis C treatment and prevention.

Hellard et al Hepatology 2014
Hellard et al JECH 2016
Treating injecting networks

Modelling the impact of treatment on prevalence at 10 years; 80% SVR

Hellard et al Hepatology 2014
The TAP Study
(Treatment and Prevention)

A community based study measuring the impact of hepatitis C treatment on disease transmission using a networks based approach.
Nurse led model of care in a van in the community
Other models of care for treating PWID in the community

- **The PRIME Study** is a randomised trial assessing the optimal model of HCV care
- Participants attending Primary Healthcare Centre randomised to receive HCV treatment in community or hospital setting

- **Aims**
  - To measure treatment uptake
  - To measure community viral load (taking into account failure to attending hospital care)
  - To show community care equivalent to hospital care
The Eliminate C Study

Treat 58/1000 PWID – an estimated 4636 PWID in Australia – annually – prevalence falls to less than 10%
Five Key Components

1. Health Promotion
2. Training & Education
3. Clinical Pathways (Models of Care)
4. Data Systems and Surveillance
5. Research & Evaluation
Elimination of hepatitis C – is possible

Requires a multipronged approach

- We must work with people who inject drugs
- High quality harm reduction
- Increased testing
- Increased access to treatment
- A vaccine
- Reduction in stigma and discrimination
Stigma and discrimination

“The war on drugs has been an utter failure.”
- Barack Obama 1/21/04

#ENDTHEWARONDRUGS
GlobalGrind
Burnet viral hepatitis elimination team

EC Partnership
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RAPID EC
Student: Ned Latham

PRIME

TAP
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Translating diagnostic and therapy advances into broad applications for the elimination of viral hepatitis

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