Hepatitis C, Prisons and Treatment Opportunities (HePaTO) – preliminary findings

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Acknowledgements

Dr Susan Carruthers – Curtin University
Dr Wendy Cheng – Royal Perth Hospital
Dr Paul Haber – Royal Prince Alfred Hospital, Sydney
Ms Jocelyn Jones – Curtin University
Mr Shamin Kinathil – Kirby Institute
Prof Michael Levy – ACT Corrections Health
Prof Andrew Lloyd - UNSW
Dr Alun Richards – Queensland Health
Prof Rosie Thein – Uni of Toronto
Prof Sandra Thompson – University of WA
A/Professor David Wilson – Kirby Institute
Dr Lorraine Yap – Kirby Institute

NHMRC Project Grant No. 594444
Australian prisoner facts and figures

- Australian full-time adult prisoner population ~30,000
- ~50,000 flow through prisons each year
- 27% Australian prisoners are Indigenous
- 94% men, 6% women
- Average age 33 years
- 126 prisons in Australia
- NSW ~180,000 prisoner movements each year
- Median sentence length 36 months
- Poor health
Prisons and hepatitis C

- Estimated 226,700 people living with chronic hepatitis C in Australia

- Current IDU in Australia = 173,907\(^1\)
- 11% IDU in prison in past year = 19,130\(^2\)
- 53% of IDU test positive for HCV = 10,139\(^2\)

- Currently treat 0.9% of eligible prisoners in NSW\(^4\)

- 2010 National Prison Entrants BBV Survey - only 7 HCV positive prison entrants across Australia reported ever receiving HCV treatment\(^3\)

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\(^2\) Australian NSP Survey Report 2012

\(^3\) 2010 National Prison Entrants Bloodborne Virus Survey

6.4 Treatment, health and wellbeing

“Custodial settings have the potential to be a focal point for hepatitis C testing, education and treatment for this priority population group”
Hepatitis C, Prisons and Treatment Opportunities (HePaTO) aims

Qualitative:
1. Explore issues associated with chronic hepatitis C (CHC) treatment in prisons in Australia (NSW, Qld, WA)

Mathematical modelling:
1. Estimate the potential number of prisoners who could be treated for CHC in prison
2. Evaluate the economic impact of treating CHC in prison
HePaTO Questions?

1. Is prison a good place to target individuals for hepatitis C treatment?
2. Are there knowledge, cultural and systemic barriers to providing hepatitis C treatment for prisoners?
3. Is there potential to scale-up hepatitis C treatment in prisons in Australia?
HePaTO Qualitative methods

In-depth Interviews
- 7 NSW prisons
- 5 Qld prisons
- 4 WA prisons
- 116 prisoners (pre-, current, completed, declined treatment)
- Referrals via the prison health clinics
- 29 health staff (nurses)

Qualitative Methods
- Guidelines for questions (e.g. barriers to treatment, perceptions of risk of HCV infection and reinfection, experiences with prison health services)
- Recorded in-depth interviews (NSW and Qld)
- Note taking in WA (digital recorders not permitted)
- Grounded theoretical framework
HePaTO Quantitative Component - Method

- Currently models the NSW prisoner population over time
  - Dynamic population level compartmental model
  - Compartments represent IDU status, HCV natural history state and treatment status

- Considers the prisoner flux
- IDU risk behaviour (injection frequency and needle sharing in prison)
- HCV progression
- HCV treatment scenarios (commencement, failure and SVR)

- Model calibrated against observed HCV incidence in NSW prisons and clinical data on the progression of HCV infection
  - Hepatitis Incidence and Transmission Study (HITS) (A. Lloyd, personal communication)
  - Australian NSP Survey
  - NSW Inmate Health Surveys (2001, 2009)
  - Expert opinion also canvassed
Conclusions

• Contact with the criminal justice system is an unfortunate but underutilised public health opportunity
• Prison represents a treatment opportunity for hepatitis C
• Challenges exist
• Current treatment numbers limited
• Need to scale-up treatment
• Investment required
• Commonwealth Government support for scale-up needed