Treatment is Prevention

Do not under-estimate the importance of prevention as the key to treatment

Michael Levy

Australian National University
The Burden

World Health Assembly (2014)

• 1.4 million deaths every year from viral hepatitis
• 500 million people living with viral hepatitis (184 million living with HCV)
• Most infected people are unaware of their infection
• Promote the involvement of civil society in all aspects of preventing, diagnosing and treating viral hepatitis
• Establish national harm reduction policies based on [national] legislation, policies and procedures ....
• Viral hepatitis is a major problem within indigenous communities

• Low- to middle-income countries have a disproportionate disease burden

• People who inject-drugs – 67% prevalence of HCV, worldwide
“The shadowy entity of non-A, non-B hepatitis unexpectedly proved to cause both liver cirrhosis and cancer. Acute hepatitis C causes only minor symptoms, but the hepatitis C virus often establishes chronic infection with sinister consequences.

“... it soon became apparent that injecting drug use had silently amplified prevalence of hepatitis C infection in young people in Western countries.

“Hepatitis C infection became the commonest cause of liver transplantation in Australia, and health authorities struggled to find an effective control strategy.”

Professor Yvonne Cossart, MJA, July 2014
• The “HCV Ab” is not an antibody – it is not protective.

• The test for virus, the PCR test, has only recently been routinely offered.

• The “window period” of 12 weeks for Ab, does not ‘fit’ with patterns of incarceration. PCR has a “window period” of 3 weeks, but ......

• Risk factors are multiple, and confounded by other health conditions which ‘collide’ with the criminal justice system.
Current surveillance definitions are over 10 years old

- Do not reflect the contemporary use of PCR testing
- Do not reflect the potential impact of treatment
- Do not reflect the clinical reality of acute hepatitis C infection
- Inadequately acknowledge hepatitis C re-infection
"The provision of sterile injecting equipment in Australian prisons is a controversial issue for some in the Australian community.

“In view of the well documented return on investment and effectiveness of Australian community-based NSPs, it is appropriate throughout the life of this strategy for state and territory governments to identify opportunities for trialling this in Australian custodial settings.”
“The principle prevention tool in Australia is the needle and syringe program – it is cost-efficient and highly effective in reducing transmission of hepatitis C and other bloodborne viruses such as HIV.

“The prevalence of hepatitis C is disproportionately higher among people in custodial settings, due primarily to a high rate of imprisonment for drug-related offences and unsafe injecting drug use in prisons. New drug therapies which will cure the large majority of hepatitis C cases should inform future approaches.”
Treatment – hepatitis C

• Only 2-4% of people who inject drugs, are accessing treatment – worldwide

• Cure is possible – current medications ~50%, triple therapy ~ 90%

• Cost – current medications ~$20,000, future treatments ~$84,000.
• Current treatment capacity is limited by side-effects of treatment (this will be reduced in the foreseeable future)

• Shared-care arrangements – currently only one shared-care clinician in Justice Health (only two in the ACT) (this will increase in the mid-term future)

• Access to specialist support (adequate currently, but no capacity to increase)
Treatment in Prison

- The proximity of health services to the client
- Mental health and addiction services
- Peer support
- Alcohol is ‘controlled’
- “Shared Care” - not only a good idea .... Essential
- Never under-estimate market forces
Treatment in Prison – the future

• Seek – screen
• Test – opt-in or opt-out?
• Treat – do new treatments have a place in high-risk environments?
• Retain – easily achieved, but will a ‘new’ market be revealed with new VERY EXPENSIVE treatments
Treatment in Prison

- A contaminated environment with restricted access to community standard infection control and harm minimisation

- Risk of post-treatment re-infection

- Co-morbidities (addictions, mental illness)

- The “punishing environment”

- Transition to community
Treatment as ........ treatment

There are 340 residents at the AMC
• ~ 50% have been exposed to hepatitis C virus
• ~ 70% of those have current infection.

• ~ 100 residents could benefit from treatment (immediately, or ‘rolled-out?)

• If a course costs $84,000, drug costs alone could reach $8,400,000.
What is next?

- Treatment as ........ treatment

- Prevention as Prevention (*sic Third National Strategy*)

- Treatment as Prevention (*sic Fourth National Strategy*)

- Prevention as Treatment (Prisoners are deferring treatment, because of the risk of reinfection)