
Elimination of hepatitis C virus infection from a regional prison

Initiative Type

Model of Care

Status

Deliver

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Summary

As part of the broader “Cairns: Hep C Free by 2020” campaign which launched on March 1 2016, rapid treatment scale-up for chronic hepatitis C was initiated across the Cairns region including at the

Lotus Glen Correctional Centre (LGCC) located near Mareeba in Far North Queensland. LGCC has over 800 beds for male prisoners and had an estimated HCV prevalence of 10-15 per cent prior to March 2016. With a collaborative approach between the Cairns Sexual Health Service, the health service at LGCC and the Cairns Hospital Liver clinic, all clients identified with chronic hepatitis C at the prison were treated within 18 months. Corresponding treatment roll-out in the broader community was also effective as the prevalence of hepatitis C started to drop amongst new prison entrants in 2017.

Key dates

Jan 2017

Dec 2017

Implementation sites

Lotus Glen Correctional Centre

Partnerships

Cairns Hospital Liver clinic, Prison Health Services-Lotus Glen Correction Centre, Cairns Sexual Health Service

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Aim

Elimination of hepatitis C virus infection from a regional prison in 18 months: the Lotus Glen Correctional Centre hepatitis C treatment project.

Benefits

- Curing hepatitis C with this rapid expansion of treatment
- Rates of liver cirrhosis and liver cancer are reduced

Background

Unrestricted access through the Australian Pharmaceutical Benefits Scheme (PBS) to direct acting antiviral (DAA) therapy for chronic HCV infection began in Australia in March 2016. Special provision was made for incorporation of DAA therapy delivery to prisoners within this program. This has provided the opportunity to evaluate rapid DAA therapy scale-up, and its impact on HCV incidence and prevalence, in Australian prisons. The micro-elimination of HCV within particular sub-populations, such as amongst prisoners, has been proposed as a way forward to reach broader elimination goals (Lazarus 2017).

Solutions Implemented

In March 2016 rapid treatment scale-up for chronic hepatitis C was initiated across the Cairns region including at the Lotus Glen Correctional Centre (LGCC) located near Mareeba in Far North Queensland. LGCC has over 800 beds for male prisoners and had an estimated HCV prevalence of 10-15 per cent prior to March 2016. With a collaborative approach between the Cairns Sexual Health Service, the health service at LGCC and the Cairns Hospital Liver clinic all clients identified with chronic hepatitis C at the prison were treated within 12 months. This was assisted by a nurse at LGCC holding the "hepatitis C portfolio". The Lotus Glen hepatitis elimination project has been run within existing service provision and with no additional funding, allowing the multi-disciplinary collaboration to use modern, almost side-effect-free treatments, in line with Australian Guidelines and

best practice. A continuous improvement culture has meant that services have been re-orientated to provide the new treatments to expand the number of prison inmates who can be on treatment simultaneously with pharmacy and nursing support. All entrants to LGCC are offered routine voluntary blood-borne virus and sexually transmitted infection screening at prison reception, with those testing positive for HCV antibody (Ab) referred to prison nursing staff for confirmatory HCV RNA and HCV genotype testing. During visits to LGCC by an external team consisting of a hepatology nurse (fortnightly visits) and sexual health physician (monthly visits), those with detectable HCV RNA underwent liver disease evaluation (either via Fibroscan® or AST to platelet ratio index [APRI]) and were prescribed an interferon-free DAA regimen for 8, 12 or 24 weeks. Medications dispensed from a nearby tertiary hospital pharmacy were sent to LGCC each month, and patients received directly observed therapy. Patients undergoing treatment received counselling and education on prevention of HCV reinfection. **An empowered workforce:** The Cairns Hep C Free by 2020 campaign and the Lotus Glen hepatitis elimination project have both empowered the local workforce of nurses, GP's, specialist doctors, pharmacists, health promotion, public health and Aboriginal and Torres Strait Islander Health Workers to be involved in the testing and treatment responses. Cairns had some of the first GP prescribers for the new treatments and are currently supporting nurse practitioners to prescribe in line with changes to national guidelines. **Consumer Voice:** The Cairns Hep C Free by 2020 campaign has worked closely with the Cairns Hepatitis Action Team which is a group of local Cairns residents who have been impacted by chronic hepatitis. Members of the Cairns Hepatitis Action Team have now all accessed the new treatment for chronic hepatitis C and have achieved a cure. They speak about their experiences regularly in local and national media to encourage others to be tested and treated. Within the prison setting, men who had completed the DAA treatment were great advocates for other prisoners to access the program.

Evaluation and Results

Between March 1 2016 and June 30 2017, 98 inmates were assessed for treatment and 96 commenced treatment. Only 1 client discontinued. Curing hepatitis C with this rapid expansion of treatment will lead to long term benefits for individuals and cost savings for the health system as rates of liver cirrhosis and liver cancer are reduced. The Cairns Sexual Health Service is partnering with the Kirby Institute at the University of NSW to write up the data and a preliminary presentation was made at the Hepatitis Elimination Conference in Cairns in August 2017. A manuscript has been provisionally accepted for publication in Clinical Infectious Diseases.

Lessons Learnt

1. Work with marginalised groups (such as people who inject drugs and prisoners) to leave no-one who desires treatment untreated
2. Extend the ability to prescribe by educating as many doctors as possible, including those in primary care
3. Include the community of those living with hepatitis C in your plans
4. Ramp up treatments rapidly to reduce hepatitis C incidence rates
5. Address stigma and discrimination to encourage current and previous injectors to access health services and to complete treatment
6. Use the media (TV, radio, press, social media) to spread the word that this infection can be eradicated easily with the new treatments
7. Get out of your large hospitals and into the community – that is where you will find the majority of those living with hepatitis C

Finally, in a

regional prison setting, with assistance from the local Hospital and Health Service clinical staff, a rapid DAA treatment scale-up program can be successful in markedly reducing the estimated HCV viraemic prevalence, demonstrating that micro-elimination of HCV within a prison setting is achievable.

References

Lazarus JV, Wiktor S, Colombo M, Thursz M. Micro-elimination - A path to global elimination of hepatitis C. *J Hepatology* **2017**.

Further Reading

Butler T & Simpson M. National Prison entrants' Bloodborne Virus and Risk Behaviour Survey Report 2004, 2007, 2010 2013 and 2016: Kirby Institute (UNSW Australia), **2017**. Lotus Glen is Australia's first hepatitis C-free prison *The Cairns Post* Daniel Bateman 3/5/17 Cairns leads regional QLD in rollout of hepatitis C drug *The Cairns Post* Kimberley Vlasic 6/11/16

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