# **BREAKING THE CHAINS OF HEPATITIS C IN PRISONS**



The chains of Hepatitis C. Photograph by Adobe Stock Photos.

A picture is worth a thousand words. Together, these words describe a scene that is very grim indeed. Specifically, the "chains" depicted in the above image refer to Hepatitis C Virus (HCV), a blood-borne, infectious disease that is characterised by liver damage and, if left untreated, may progress to organ failure and cancer. This is of particular concern in Australia's prisons, where it is estimated that 22% of the prison population is infected with HCV, compared with 15% of the prison population worldwide. It is evident that the prevalence of HCV in the incarcerated population is a public health concern, even more so because of the risk of spreading the disease within the general population and the practice of sharing drug-injecting equipment, such as needles.

Due to the criminalisation of illegal drug use, people who inject drugs form a notable percentage of the imprisoned population and are at higher risk for HCV infection. And yet, despite the significant rates of infection, few prisoners have actually received treatment for HCV. Thus, the question is raised – why is this happening, and what should be done about it?

# Current efforts – what's being done and why it's not enough

According to one study conducted in Australian prisons, 8,000 prisoners out of 50,000 prisoners total tested positive for HCV antibodies, but only 313 received antiviral treatment. Clearly, despite current efforts, many barriers remain to seeking treatment. Recent advancements in direct-acting antivirals (DAAs) have profoundly increased the efficacy of HCV treatments, by as much as 95% (compared to previous interferon-based therapies at 54-63% efficacy) and with minimal side effects. With the availability of generic treatments, the cost of these treatments has also been reduced from \$84,000 USD to \$24,000 USD in 2018. This is, however, still a significant amount and remains one of the major obstacles to the distribution of these resources.

Policy also plays a crucial role in targeting HCV. The Queensland Alcohol and Other Drugs Action Plan 2015-2017 identified injecting drug use as a major risk factor for transmission and prison as a "high-risk environment" due to the high prevalence of this behaviour. Identifying prominent risk factors is an important first step towards lowering the rate of infection, particularly from a prevention point of view. However, without effective prevention programs that target problem areas, such as education or living in underserved communities, current policies are not enough.

# A call to action – what needs to be done

First and foremost, policies should include a major scale-up of current prevention strategies, such as screening and testing, followed by treatment of those infected by HCV. The evidence, as discussed, clearly demonstrates the efficacy of treatments and the <u>"gold standard" of screening and testing</u>. Thus, it is not the treatments or processes themselves that are the issue, but the accessibility of these resources, and that is what has the greatest impact on the healthcare of those in prison.

This will, of course, require a major financial investment, and this is not to be taken lightly. Resources are limited, but there is value to be placed on the thousands of lives that HCV treatment could possibly save. Because HCV is disproportionately prevalent amongst those in prison, this is the best environment to concentrate those resources and lessen the burden of the disease.

Naturally, education about HCV symptoms and risks, such as unsafe needle sharing, is also important to consider, but cannot serve as the only strategy, as knowledge alone is sometimes not enough to deter behaviour.

A more immediate strategy is "harm reduction", mainly through <u>prison needle syringe programs and</u> <u>opioid substitution</u>, which has been shown to reduce reinfection rates and should be included in policies targeting HCV. Current policies in both the prison and general population do not focus primarily on harm reduction programs, demonstrating critical gaps in prevention efforts and the risk of reinfection.

## Moving towards HCV eradication

The prison population is a key target group in the movement towards eliminating HCV. Disproportionately, those within this population are from underserved communities and participate in risk-associated behaviours, such as injecting illegal drugs. This has led to a large concentration of those infected with HCV within the custodial setting, making it a prime environment for directing efforts to control the disease.

Direct-acting antivirals, along with routine screening and testing, have been cited as the gold standard for the treatment of HCV. However, treatment has not been made available to all eligible prisoners, and a massive scale-up of current treatment and prevention efforts is needed in order to effectively counter the spread. This will require further government expenditures, with the cost of treatment still remaining a barrier to the accessibility of care.

Unless appropriate treatment, education, and harm reduction programs are made available to inmates and the general population, HCV cannot be eliminated and will continue to contribute to the global burden of disease. The prison population is the most prominent at-risk group and must be targeted if states are to move towards eradication by 2030.

## Meet the Author



Courtney Chai is a second-year Doctor of Medicine and Master of Public Health student at the University of Queensland. She graduated with a Bachelor of Science in Biology from the University of Washington in 2014 and served as the Campus Advocate for Seattle Against Slavery, a grassroots organisation campaigning against human trafficking. She has a special interest in emergency medicine and advocating for human rights and underserved communities.

## **Disclosure Statement**

- Courtney declares no conflicts of interest.
- All the information contained in this article is in the public domain.

## **Reference List**

Alcorn, T. (2020, January 16). "Major milestone": Governor's budget targets hepatitis C epidemic in prisons. *New Mexico In Depth*. <u>https://nmindepth.com/2020/01/16/major-milestone-governors-budget-target-hepatitis-c-epidemic-in-prisons/</u>

Lafferty, L., Wild, T. C., Rance, J., & Treloar, C. (2018). A policy analysis exploring hepatitis C risk, prevention, testing, treatment and reinfection within Australia's prisons. *Harm Reduction Journal*, *15*(1), 39. <u>https://doi.org/10.1186/s12954-018-0246-6</u>

Mina, M. M., Herawati, L., Butler, T., & Lloyd, A. (2016). Hepatitis C in Australian prisons: A national needs assessment. *International Journal of Prisoner Health*, *12*(1), 3–16. <u>https://doi.org/10.1108/IJPH-08-2015-0025</u>

Stone, J., Fraser, H., Lim, A. G., Walker, J. G., Ward, Z., MacGregor, L., . . . Vickerman, P. (2018). Incarceration history and risk of HIV and hepatitis C virus acquisition among people who inject drugs: a systematic review and meta-analysis. *The Lancet Infectious Diseases, 18,* 1397–1409. <u>https://doi.org/10.1016/S1473-3099(18)30469-9</u>

Stöver, H., Meroueh, F., Marco, A., Keppler, K., Saiz De La Hoya, P., Littlewood, R., Wright, N., Nava, F., Alam, F., Walcher, S., & Somaini, L. (2019). Offering HCV treatment to prisoners is an important opportunity: Key principles based on policy and practice assessment in Europe 11 Medical and Health Sciences 1117 Public Health and Health Services. *BMC Public Health*, *19*(1), 30. <u>https://doi.org/10.1186/s12889-018-6357-x</u>