

## **VIOLENCE AND HEPATITIS C TRANSMISSION IN PRISON – A MODIFIED SOCIAL ECOLOGICAL MODEL**

### **Authors:**

Sazzad HMS<sup>1</sup>, McCredie L<sup>2</sup>, Treloar C<sup>3</sup>, Lloyd AR<sup>1</sup>, Lafferty L<sup>1,3</sup>

<sup>1</sup>The Kirby Institute, UNSW Sydney, Australia, <sup>2</sup>Centre for Health Research in Criminal Justice, Justice Health, Sydney, New South Wales, Australia, <sup>3</sup>Centre for Social Research in Health, UNSW Sydney, Australia

### **Background:**

Transmission of hepatitis C virus (HCV) among the prisoner population is most frequently associated with sharing of non-sterile injecting equipment. Other blood-to-blood contacts such as tattooing, and fights are also common in the prison environment and have been associated with HCV transmission. The context of such non-injecting risk behaviours, including physical violence, are poorly studied. The modified social-ecological model (MSEM), which is a comprehensive approach to identifying contextual concerns regarding HCV transmission risk from the individual to the broader policy levels, was used to examine HCV transmission risk and violence in the prison setting.

### **Methods:**

The Hepatitis C Incidence and Transmission Study in prisons (HITS-p) cohort enrolled HCV uninfected prisoners with injecting and non-injecting risk behaviours, who were followed up for HCV infection. Qualitative interviews were conducted in 23 participants; of whom eight were female. Deductive analysis was undertaken to identify violence as risk within prisons among individual, network, community, and public policy levels.

### **Results:**

The risk context for violence and HCV exposure varied across the MSEM. At the individual level, prisoners were concerned about blood contact during fighting, such as limited scope to use protective gloves to prevent blood contamination. At the network level, drug debt, informing on others to correctional authorities, and crimes like paedophilia were risk factors for violence and potential HCV transmission. At the community level, racial influence and social groupings were identified as triggers for violence. At the policy level, rules and regulations by prison authority influenced the concerns and occurrence of violence and potential HCV transmission. For example, prisoners close to parole avoided fighting/violence because that might delay parole.

### **Conclusion:**

Contextual concerns regarding violence and HCV transmission were evident at each level of the MSEM. Further evidence-based interventions targeted across the MSEM may reduce prison violence and subsequent HCV exposure.

### **Disclosure of Interest Statement:**

*HMSS, LM, ARL, LL has no declaration of interest to report. CT has received speaker fees from Abbvie and Gilead.*