Overview

The publication of the Annual Report of Trends in Behaviour (ARTB) in 2016 sits within a very dynamic context for hepatitis C. Some of the indicators that we have relied on from the early days are no longer enough to understand these changes and the growing complexity of the field. This complexity generates additional questions to consider and requires ongoing adaption of surveillance responses in order to capture these advances in biomedical technologies and communities' evolving practices. We also need to take additional care to unpack and interpret the data we have generated to continue to contribute to the Australian viral hepatitis response.

Throughout the ARTB we make comment on not only the meanings of the data we have generated, but the methods by which they were obtained including the need to update questions and measures and approaches. While we seek a stable surveillance system, it must be one that is meaningful to the context and fit for purpose. This takes significant effort to inform ourselves from a range of perspectives, being abreast of clinical and technical advances in medications, from the policy perspective in relation to emerging strategic interests and especially in relation to what is important to the variety of communities affected by viral hepatitis, including detailed knowledge of the specific needs of communities and differences between them.

This is the most comprehensive ARTB yet. We have reorganised the presentation of material to reflect prevention, care and treatment cascades. The wide ranging nature of the report makes it difficult to present a complete summary. Different audiences will seek information from various sections of the report. But beyond the cascade approach to measuring risk practices and uptake of treatment, is the need to triangulate with data from a range of other sources.
However, in relation to viral hepatitis, a few key issues stand out:

**Models of care for viral hepatitis**

A significant proportion of the Centre for Research in Health (CSRH) research program is focused on understanding the decisions made by people living with viral hepatitis regarding engagement with care, and subsequently, how systems of care could be adapted to better meet the needs of their clients. We need to examine how better models of care can be provided to the diverse communities most affected by hepatitis B. For a number of years, our work has sought to examine new models for hepatitis C care, including peer delivered models. The ways in which health services should be “fit for purpose” will transform again from 2016 with new generations of hepatitis C virus (HCV) treatments available for all.

**Stigma**

One of the strengths of the CSRH research program across all areas has been the continued spotlight thrown on stigma. Stigma is a key focus of this ARTB and underpins many of the analyses whether these are direct examinations of the impacts of stigma or lens with which we interpret findings. We examine the social positions, meanings and identities of BBVs and STIs and communities living with these. We examine the relationships of these social meanings with prevention, care, treatment and broader wellbeing experiences. We have examined the experience of Aboriginal people living with hepatitis C, including the protective effects of community attachment and the impact of stigma on decisions about treatment for HCV. We also flag a future project in which we can report, as an indicator, changes over time in the experience of stigma among key priority populations.

**Data summaries**

**Drug use and injection by participants in Gay Community Periodic Surveys**

Amyl nitrite is the most commonly used drug by gay men in the GCPS. The proportion of men reporting the use of amyl nitrite has remained stable over the last decade, and was used by around 35%-40% in the six months preceding the survey. The rate of cocaine use has also stabilised at around 10%-13%. The use of other recreational drugs, including cannabis, ecstasy and methamphetamines, has declined since 2006. In contrast, the proportion of men reporting using erectile dysfunction medication, such as Viagra, has increased over the 10-year period, from 21.2% in 2006 to 25.5% in 2015. In the past three years, reported usage of all substances has remained stable, except a decline in ecstasy.

More detailed analysis from the GCPS data focusing on methamphetamine use shows that any use of crystal methamphetamine, but not powder methamphetamines (i.e. speed), in the previous six months has increased slightly since 2010 (9.6% in 2010 to 11.4% in 2014). Mixing crystal methamphetamine use during various sexual contexts, however, is more likely to be adopted by certain sub-groups of gay and bisexual men, placing them at increased risk of both HIV and HCV transmission.

The use of crystal methamphetamine particularly in the context of sexual encounters and poly drug use (with or without injection) among specific groups of gay men suggests an urgent need to provide appropriate harm reduction and treatment services for these men.

Injecting drug use is low but more commonly reported among gay men than in the general population. The 10-year trends have remained stable nationally and across Melbourne, Sydney and Queensland at around 5%-7%. The proportion of gay men reporting any injecting drug use in the previous six months has increased in Melbourne and Queensland and remained stable in Sydney in the last three years.
Sexual identity and substance use in the general Australian population among participants in the National Drug Strategy Household Survey

Gay, lesbian and bisexual (GLB) men and women are more likely to report illicit drug use (non-injection and injection) in the previous 12 months than their heterosexual peers (36% vs 17% for men; 29% vs 11% for women, respectively). GLB men and women are at heightened risk of harms caused particularly by problematic drug use, which calls for more responsive and targeted harm reduction services for this population in Australia.

Hepatitis C risk factors, attitudes and knowledge amongst HIV-positive, -negative and status unknown gay and bisexual men in Australia

Differences were found to exist between HIV-negative, HIV-positive and HIV-untested gay and bisexual men on a range of sexual activities and attitudes associated with HCV. This suggests that HCV education and prevention for gay men may be most effective if tailored according to HIV status.

An online survey conducted in 2013 at CSRH of 405 gay and bisexual men found that increased HCV knowledge was associated with having completed university education, being HIV-positive and a history of drug injection.

Hepatitis C, sex and drug-related risk among Australian gay and bisexual men

Sharing of injecting equipment by Australian gay and bisexual men was associated with crystal methamphetamine use and sexual encounters. In an online survey of 474 gay and bisexual men, of the 71 men who had injected in the previous six months, 41% (n=29) reported sharing ancillary injecting equipment (including needle syringes). This suggests further investigation is needed into the sub-cultural meanings of crystal methamphetamine use, the injection of drugs and the sharing of injecting equipment within social-sexual settings among certain subgroups of gay men in Australia.

Understanding and preventing hepatitis C transmission within heterosexual couples

Couples are a key group to examine for hepatitis C prevention but little attention has been provided to this group. A CSRH qualitative interview study of 40 heterosexual couples who inject drugs found that health promotion efforts should recognise the unique issues that face couples who inject drugs, and that disregarding their partnerships means missed opportunities for understanding decision-making around injecting drug use and HCV prevention.

Peer distribution of sterile injecting equipment

Peer distribution of injecting equipment has been, until recently, illegal in all Australian jurisdictions. CSRH research using qualitative and quantitative methods has demonstrated that peer distribution is relatively frequent and grounded in altruism and concerns for safety. A recent analysis of the legal and regulatory frameworks around peer distribution conducted by CSRH in collaboration with colleagues at the National Drug and Alcohol Research Centre and Monash University showed that the laws around “peer distribution” of equipment portray people who inject drugs as needing control and oversight. This portrayal undermines the potential to engage people who inject drugs as partners in the prevention of blood-borne viruses. The recent change in three jurisdictions to remove this legal barrier to safer injecting practice is welcome and supported by evidence.
Injecting drug use and BBV risk among Indigenous young people in incarceration

The Goanna study, which included a survey of 2,877 young Aboriginal people, showed a low prevalence of recent injecting, at about 3% of the total sample, although this is a higher proportion than the 1% reported in the general population. We observed a very high rate of receptive needle and syringe sharing (37% of those who had injected) although this is similar to that reported in recent studies of younger injectors. At an average age of 21 years, almost half of the participants in this study who had injected had a history of incarceration.

Pathways to alcohol and other drug care and treatment among young drug users involved with the police in NSW and Victoria

The prevalence of HCV among those incarcerated in juvenile justice facilities is very high. In a project conducted in collaboration with Turning Point Alcohol and Drug Centre, interviews (n=64) were conducted with police, young substance users aged 16-24 years, and staff of youth-focused alcohol and drug services and analysis undertaken of existing survey data. This project showed that understanding how young people can be supported to avoid contact with the criminal justice system is important for the HCV response.

Hepatitis C risk in prison settings

With a range of collaborators, CSRH has been active in commenting on the structural factors affecting hepatitis C risk in prison. Without access to sterile equipment in prison via a formal Needle and Syringe Program, inmates have few means by which to reduce their HCV risk. Programs and policies that can impact this risk include those within the criminal justice system (such as decriminalisation of drug use or alternative, community-based sentencing options for those with drug-related convictions) and within the corrections health system (such as greater access to drug treatment programs).

Knowledge about liver diseases and liver fibrosis assessment among people who inject drugs in alcohol and other drug treatment settings

The LiveRLife study conducted in collaboration with the Kirby Institute and health service partners provided Transient Elastography screening and examined knowledge and attitudes before and after screening. Among 253 people who inject drugs attending drug and alcohol treatment, baseline HCV knowledge scores were moderate, but there were significant gaps in knowledge of HCV antibody testing, factors impacting on HCV disease progression, and response rates to HCV treatment. Transient Elastography as a means to assess liver fibrosis was highly acceptable prior to screening and this acceptability increased after screening.

A review of interventions to increase hepatitis B and hepatitis C screening, assessment and monitoring

Complex, multimodal educational interventions appear to cause behavioural changes that increase rates of testing, vaccination, and treatment. As well, community-based interventions have used a variety of theoretically informed and culturally appropriate strategies to increase uptake of screening, including: the use of lay health workers from culturally and linguistically diverse communities; role-plays; physician education; electronic physician prompts; FibroScan (Transient Elastography) in street-based outreach clinics; nurse-led assessment clinics; hepatitis A and B vaccinations; support; and motivational interviewing-enhanced case management assistance.
These interventions have successfully: engaged people who inject drugs with health services; facilitated hepatitis care coordination in opioid substitution clinics; integrated infectious disease programming in mental health settings and increased acceptance of such services among clients; and lowered costs of screening and reduced waiting times. The following interventions were reported as potentially cost-effective: screening all recent arrivals for chronic HBV and treating recent arrivals; implementing an opt-out, general practitioner HCV case-finding intervention; interventions targeting multiple points along the HCV cascade-of-care; and one-off HCV testing of all people in the birth cohort 1945-1965.

Positive Speaking among people living with hep C
This qualitative study explored the experiences of nine people who were part of the positive speakers program (C-een and Heard) managed by Hepatitis NSW. People who take up positive speaking roles had typically witnessed or experienced hepatitis C-related discrimination, particularly in health care settings. These experiences led speakers to challenge misinformation and negative attitudes and start on a path of advocacy, culminating in participation in positive speaking programs.

The role of Aboriginal community attachment in buffering against stigma and promoting lifestyle changes after hepatitis C diagnosis
In a sample of 203 Aboriginal people living with HCV, those who felt more attached to their Aboriginal community were more likely to show greater resilience, report having a better quality of life and report less HCV-related stigma than those who were not as attached to their Aboriginal community. Attachment to an Aboriginal community was associated with positive lifestyle changes, such as changing their diet, reducing alcohol or illicit drug use, increasing level of exercise and having more regular HCV check-ups after diagnosis with HCV.

Multiple forms of stigma among Aboriginal and Torres Strait Islander people living with hepatitis C
In a qualitative interview study of 39 Aboriginal people living with hepatitis C, another layer of HCV-related stigma was described, which related to the cultural experience of shame, was found to have a profound impact on health and health care outcomes.

The impact of stigma on the provision of health care for people who inject drugs
In a survey of 57 health care workers, participants' beliefs about their colleagues' attitudes impacted on whether they would prescribe pain medication to a person who injected drugs. Those who perceived their work colleagues to be more supportive of harm reduction were more willing to prescribe pain medication, whereas participants' own support for harm reduction had no bearing on their intention to prescribe medication.

Discrimination by health care workers versus discrimination by others: countervailing forces on hepatitis C treatment intentions
In a survey of 416 people who reported having acquired HCV through use of non-sterile injecting equipment, experiencing discrimination from health workers resulted in lower intentions to engage in HCV treatment in the future.
Evaluation of two community-controlled peer services accessing hepatitis C services in OST clinics

In a qualitative interview study (n=42) conducted in collaboration with the Kirby Institute, NUAA (the NSW Users and AIDS Association) and participating health services (part of the ETHOS project), we described the ways in which peer workers may enhance the operation of hepatitis C clinics by engaging clients in education and support, allowing better prepared clients to engage with clinical staff. We conducted interviews with clinic clients (n=31), clinic staff (n=8) and peer workers (n=3) at two clinics in which peer support programs were operating. Although this study was conducted in the era of interferon-based treatments, it is suggested that peer workers remain essential in the era of new treatments to provide ongoing education and support, and to assist in moving the discourse away from the “horror stories” of interferon-based treatments.

Structural barriers and facilitators of hepatitis B and hepatitis C treatment and care in primary care settings: a literature review

This review focused primarily on the structural barriers and enablers to hepatitis B and C treatment and care in primary care settings. The management of HBV within primary health care settings was improved by community outreach programs, community-based education programs, and professional education programs.

Similarly, the management of HCV within primary health care settings could be enhanced through the development of social and structural interventions to promote HCV treatment, including strategies to address: stigma reduction; drug dependence; social support; mental health care; infectious disease; improvements in housing; enhanced geographic access to treatment; offsetting transport costs; overcoming the consequences of the criminalisation of illicit drug use; and sensitivity to cultural and ethnic diversity and gender differences. Primary care services should be promoted as community-based, mobile and/or situated in areas where people who inject drugs live, congregate and access health care and other services.

To view a full copy of the Annual Report of Trends in Behaviour 2016 - Viral Hepatitis Supplement, visit bit.ly/csrh_artb