# Prisons, hepatitis C and harm minimisation

Michael H Levy, Carla Treloar, Rodney M McDonald and Norman Booker

he Australian response to illicit drugs is directing a disproportionate burden of drug-related illness, including hepatitis C virus (HCV) infection, into the prison system. <sup>1-3</sup> Not only is the prevalence of HCV high among prison entrants, <sup>4</sup> but other prisoners are also at risk of contracting HCV while incarcerated. <sup>5</sup> Given the mobility of prisoners between the community and prison, the public health repercussions of prisoner health, for the whole community, are potentially great.

The National Drug Strategy promotes harm minimisation. In contrast, prison policies promote zero tolerance and abstinence-based treatment programs. Australian prisons are not without risk to prisoners and their families; 6 nor to prison officers — in 1991, a prison officer who had been stabbed with a syringe by a mentally ill prisoner subsequently developed AIDS and died. 7

The highly politicised and insensitive industrial environment in prisons compromises the implementation of harm-minimisation strategies and allows misconceptions to thrive and unfounded fears to remain uncorrected.<sup>8,9</sup> The following are two examples:

- Exploratory and anonymous discussions around the issue of prison-based injecting-equipment exchange have been avoided by prison officers<sup>8</sup> and then defended by the employing custodial authorities.<sup>9</sup>
- Despite high levels of community acceptance for body art and skin piercing, a planned prison-based tattoo pilot project for Victorian prisoners has never been implemented, due to opposition from prison officers (the idea was "blasted by jail guards"). <sup>10</sup>

There has been an absence of bipartisan and consensus-seeking policy development between the health and custodial sectors in Australia. Despite three national reports calling for changes to bloodborne virus prevention in Australian prisons, <sup>1-3</sup> there is still only piecemeal implementation of harm-minimisation programs. A federal government report noted that "the implementation and evaluation of prevention efforts for hepatitis *C* infection in prisons have lagged behind efforts in the community". Importantly, the document stated that "unless concerted efforts are directed towards the control of hepatitis *C* transmission among prisoners, it is unlikely that the hepatitis *C* epidemic in the broader community will be brought under control". <sup>11</sup>

The Australian National Council on Drugs has recognised the role that prisons play in the hepatitis C epidemic. A 2002 position paper specifically recommended the provision of educational programs on drug use, hepatitis C and other bloodborne infections for inmates and custodial staff and the provision of bleach for cleaning injecting equipment.<sup>12</sup>

The 2003 review of the first National Hepatitis C Strategy<sup>2</sup> made the following recommendations:

- That the lessons learnt from the application of harm-reduction strategies in custodial settings in other countries be explored for implementation in Australia;
- That custodial staff be provided with training about HCV in an occupational health and safety context;
- That broad support be given to initiatives designed to divert illicit drug users away from incarceration and into non-custodial alternatives; and
- That nationally consistent standards for education and prevention be implemented in custodial settings.

## **ABSTRACT**

- Australian prisons have been identified as a focus of the ongoing hepatitis C epidemic.
- Harm minimisation is the major strategy directed to community-based public health measures to control hepatitis C.
- Harm-minimisation strategies to protect inmates and workers are incompletely and inconsistently applied in Australian prisons.
- Overseas experience has demonstrated that introducing injecting-equipment exchange programs and professional tattoo parlours in prisons could at least partially reduce the risks of ongoing hepatitis C transmission, and would support prevention and treatment programs.
- A two-stage approach is suggested: firstly, implementing programs of proven effectiveness consistently across the eight Australian jurisdictions, and, secondly, expanding current initiatives in the light of international "best practice".
  MJA 2007; 186: 647–649

# **Current practice**

Health education is the most widely employed method of preventing bloodborne viral infections. Prisoners are informed of the risks of infection and transmission, but are not provided with the means of applying this knowledge. The provision of condoms, lubricants, and programs to combat sexual violence recognises the fact that sexual activity does occur in prisons. Pharmacotherapies have been shown to be effective in reducing major risks, harms and costs associated with untreated opiate addiction, and are also associated with reduced viral hepatitis transmission and lower mortality in the immediate post-release period.

The Australian situation is characterised by inconsistent application of harm-minimisation strategies and slow adoption of successful programs between jurisdictions (Box) — the first prison-based methadone maintenance program was initiated in New South Wales in 1986, the second in South Australia in 1999.

Two initiatives that could potentially minimise the contribution prisons make to the HCV epidemic in Australia deserve consideration: the provision of sterile injecting equipment and the establishment of professional tattoo parlours in prisons.

## Prison-based needle-exchange programs

In 2001, 49% of female prisoners and 48% of male prisoners in NSW reported that they had used illicit drugs while in prison. Of those prisoners with a prison drug-use history, 43% of women and 24% of men had injected while in prison. The specific risks of injecting in a prison environment have been highlighted in anthropological<sup>13</sup> and epidemiological studies.<sup>14</sup>

Since 1992, several jurisdictions in other countries have introduced prison-based exchanges of injecting equipment. Five of six German prison needle-exchange programs were closed for local political, not operational, reasons.

#### VIEWPOINT

Jurisdiction	Bleach	Condoms	Pharmacotherapies	Notes
ACT	"Cleaning agents" available	Available on request	Initiation and maintenance programs for methadone; buprenorphine not encouraged	Remand prison only. New facility planned for 2008. Injecting-equipment trial mooted, but not yet approved
NSW	Bleach available anonymously	Available anonymously	Initiation and maintenance programs for methadone and buprenorphine. Some prisons do not accept prisoners receiving pharmacotherapies	Methadone first introduced in 1986. Condoms first introduced in 1996. Tattoo trial explored in 1998, but never implemented
NT	"Cleaning agents" available	Not available	Methadone maintenance available	
QLD	Not available	Not available	Methadone maintenance only available for female inmates	
SA	Not available	Available anonymously	Initiation and maintenance programs for methadone and buprenorphine in all prisons	
TAS	Not available	Available anonymously	Maintenance programs for methadone only. No initiation of treatment	
VIC	Bleach available anonymously		Maintenance programs for methadone, buprenorphine and suboxone. Initiation on methadone. Two of 13 prisons do not accept prisoners receiving pharmacotherapies	Tattoo trial not implemented in 2005 due to opposition from prison officers
WA	"Cleaning agents" available	Available anonymously	Methadone initiation and maintenance; suboxone maintenance in all prisons	

In 2001, a position paper supporting the exchange of injecting equipment by prisoners was developed by the peak injecting drug users' organisation. <sup>18</sup> It has not been considered by any of the eight Australian jurisdictions.

At a 2005 workshop, <sup>19</sup> the case for prison syringe-exchange programs was made. The provision of bleach and methadone is not a sufficient response to the risk of HCV transmission via syringe-sharing among prisoners. Prison syringe-exchange programs reduce the risk behaviours and prevent disease transmission related to injecting drug use. They are safe for prisoners and for prison staff. They have other positive outcomes on prisoners' health, such as increased referral to treatment services, fewer overdose events, and reduced polydrug use. Syringe-exchange programs do not increase drug use or initiation of injecting among non-injectors, they do not undermine abstinence-based programs, and are adaptable to differing prison environments using a variety of distribution methods.

In January 2007, the Queensland State Coroner noted the inability of custodial authorities to keep drugs out of prison, and consequently recommended that an injecting-equipment exchange be provided to prisoners (in Queensland), in addition to access to pharmacotherapies. <sup>20</sup> The Queensland Department of Corrective Services rejected the Coroner's recommendations.

## Safe tattooing in prison

The 2001 New South Wales inmate health survey<sup>21</sup> reported that 60% of female prisoners and 58% of male prisoners in NSW said they had at least one tattoo. Of those with tattoos, 37% of the women and 42% of the men had had at least one tattoo done in prison.

The Canadian Corrections Service initiated a pilot tattoo project in August 2005 with an understanding that regulated tattooing would implement higher infection control standards than the existing peer-run clandestine activity.<sup>22,23</sup> The infection control standards set for the prison pilots exceeded those currently in the Canadian community, but would be consistent with Australian standards.<sup>24</sup> The trial ceased in September 2006.<sup>25</sup> A number of benefits were identified, including better control of tattooing equipment and enhanced education opportunities for both inmates and staff.

#### **Conclusions**

As long as Australia fails to provide prison prevention programs for bloodborne viral diseases at community and international standards, our public health and human rights will both be compromised.

The increasing body of evidence supporting harm-minimisation programs for prisoners may soon be tested in an Australian court, with the possibility of Australian jurisdictions being mandated to implement programs that they are poorly prepared for.

The highest priority for federal and state governments is to address the inconsistencies in the way proven harm-minimisation practices are applied across the eight jurisdictions. When that has been addressed, the evidence from prison-based harm-minimisation programs overseas should be applied in Australia. Our prisons will then be safer to work in, reside in and return from.

# **Competing interests**

None identified.

## **Author details**

Michael H Levy, MB BS, MPH, FAFPHM, Clinical Conjoint Associate Professor<sup>1</sup>

Carla Treloar, BSc(Hons), PhD, Senior Research Fellow<sup>2</sup>

#### VIEWPOINT

Rodney M McDonald, BAppSc, Workshop Organiser<sup>2</sup> Norman Booker, GradDipAdultEd, Program Coordinator<sup>3</sup>

- 1 School of Public Health, University of Sydney, Sydney, NSW.
- 2 National Centre in HIV Social Research, University of New South Wales, Sydney, NSW.
- 3 NSW Health Workforce Development Program in Hepatitis, HIV and Sexual Health, Sydney, NSW.

Correspondence: mrya@tpg.com.au

#### References

- 1 Australian National Council on Drugs. Supply, demand and harm reduction strategies in Australian prisons. Canberra: ANCD, 2004.
- 2 The road not taken. Review of the National Hepatitis C Strategy 1999–2000 to 2003–2004. Canberra: Commonwealth of Australia, 2003.
- 3 Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis, Hepatitis C Sub-Committee. Hepatitis C Virus Projections Working Group: estimates and projections of the hepatitis C virus epidemic in Australia 2006. Canberra: MACASHH, 2006.
- 4 Butler T, Boonwaat L, Hailstone S, et al. The 2004 Australian prison entrants' blood-borne virus and risk behaviour survey. Aust N Z J Public Health 2007; 31: 44-50.
- 5 Butler T, Kariminia A, Levy M, Kaldor J. Prisoners are at risk for hepatitis C transmission. Eur J Epidemiol 2004; 19: 1119-1122.
- 6 Dolan K, Hall W, Wodak A, Gaughwin M. Evidence of HIV transmission in an Australian prison [letter]. *Med J Aust* 1994; 160: 734.
- 7 Jones PD. HIV transmission by stabbing despite zidovudine prophylaxis [letter]. Lancet 1991; 338: 884.
- 8 Dolan KA, Rutter SA, Wodak AD, et al. Is a syringe exchange feasible in a prison setting [letter]? *Med J Aust* 1996; 164: 508.
- 9 Eyland SJ. Is a syringe exchange feasible in a prison setting [letter]? *Med J Aust* 1996; 165: 59.
- 10 Buttler M, Hodgson S. Uproar at prisoner tattoo bid. *Herald Sun* (Melbourne) 2005; 5 Nov: 11.
- 11 Dolan K. The epidemiology of hepatitis C infection in prison populations [discussion paper]. Canberra: Commonwealth Department of Health and Aged Care, 2000.
- 12 Australian National Council on Drugs. Needle and syringe programs. Position paper. Canberra: ANCD, 2002. http://www.ancd.org.au/publications/pdf/pp\_needle\_syringe.pdf (accessed May 2007).

- 13 Small W, Kain S, Laliberte N, et al. Incarceration, addiction and harm reduction: inmates experience injecting drugs in prison. Subst Use Misuse 2005; 40: 831-843.
- 14 O'Sullivan BG, Levy MH, Dolan KA, et al. Hepatitis C transmission and HIV post-exposure prophylaxis after needle- and syringe-sharing in Australian prisons. *Med J Aust* 2003; 178: 546-549.
- 15 Nelles J, Fuhrer A, Hirsbrunner H, Harding T. Provision of syringes: the cutting edge of harm reduction in prison? *BMJ* 1998; 317: 270-273.
- 16 Dolan K, Rutter S, Wodak AD. Prison-based syringe exchange programmes: a review of international research and development. *Addiction* 2003; 98: 153-158.
- 17 Betteridge G. Germany: study shows effectiveness of prison needle exchange. HIV/AIDS Policy Law Rev 2006; 11: 33-34.
- 18 Australian Injecting and Illicit Drug Users League (AIVL). Prison-based syringe exchange programs (PSE programs). Discussion paper. Canberra: AIVL, 2001. http://www.aivl.org.au/files/PrisonBasedSyringeExchange-Programs.pdf (accessed May 2007).
- 19 Prisons and blood-borne viruses: old challenges, new solutions. Consortium for Social and Policy Research on HIV, Hepatitis C and Related Diseases; 2005 Nov 25; Sydney, Australia.
- 20 Barnes M, State Coroner. Queensland Courts. Office of the State Coroner. Findings of the inquest into the death of Darren Michael Fitzgerald. Delivered on 19 Jan 2007.
- 21 Butler T, Milner L. The 2001 New South Wales inmate health survey. Sydney: NSW Corrections Health Service, 2003. http://www.justicehealth.nsw.gov.au/pubs/Inmate\_Health\_Survey\_2001.pdf (accessed May 2007).
- 22 Gratton F. Pilot project for safe tattooing practices at Cowansville Institution. Int J Prisoner Health 2006; 2: 251-252.
- 23 Gaskell D. Safer tattooing practices initiatives. Focus on infectious diseases [Internet] Winter 2006; 4(2). http://www.csc-scc.gc.ca/text/pblct/hsbulletin/2006/no2/vol4\_no2\_5\_e.shtml (accessed May 2007).
- 24 NSW Health. Guidelines on skin penetration. http:// www.health.nsw.gov.au/public-health/ehb/general/skinpen/guidelines\_ skin\_pen.pdf (accessed May 2007).
- 25 CBC News, Canada. Prison tattoo parlours get the axe. 4 Dec 2006. http://www.cbc.ca/canada/story/2006/12/04/tattoo-program.html (accessed May 2007).

(Received 6 Oct 2006, accepted 12 Mar 2007)