



## Anxiety about HIV criminalisation among people living with HIV in Australia

Adam Bourne <sup>a</sup>, G. J. Melendez-Torres<sup>b</sup>, An Thanh Ly<sup>a</sup>, Paul Kidd<sup>c</sup>, Aaron Cogle<sup>d</sup>, Graham Brown<sup>a</sup>, Anthony Lyons <sup>a</sup>, Marina Carman<sup>a</sup>, John Rulee<sup>d</sup> and Jennifer Power <sup>a</sup>

<sup>a</sup>Australian Research Centre in Sex, Health & Society, La Trobe University, Melbourne, Australia; <sup>b</sup>Peninsula Technology Assessment Group, College of Medicine and Health, University of Exeter, Exeter, UK; <sup>c</sup>Fitzroy Legal Service, Melbourne, Australia; <sup>d</sup>Centre for Social Impact, UNSW Sydney, Australia

### ABSTRACT

Many countries, including Australia, have laws that enable criminal prosecution of an individual based on reckless or intentional transmission of HIV to another person. Previous research has suggested that criminalisation of HIV may serve to hamper public health efforts by inhibiting HIV status disclosure or testing. Limited research to date has sought to examine the broader impact of criminalisation on the health and wellbeing of people living with HIV, which this paper aims to address. Drawing on cross-sectional data from 895 people living with HIV in Australia, this paper describes associations between standard measures of mental health and resilience with a newly devised scale measuring anxiety about HIV criminalisation. Findings suggest that laws criminalising HIV transmission have a broadly negative impact on wellbeing of people living with HIV, a situation that is exacerbated for gay and bisexual men, and other people living with HIV who may face intersecting forms of marginalisation based on race, gender or class. There is little justification for these laws being applied in Australia and the findings add weight to advocacy seeking to overturn criminalisation across the world.

### ARTICLE HISTORY

Received 18 August 2020  
Accepted 24 May 2021

### KEYWORDS

HIV criminalisation; people living with HIV; Australia; mental health

## Introduction

Many countries, including Australia, have sought to criminalise acts which cause, or are seen as endangering, the transmission of HIV. A recent global review found HIV-related arrests, investigations and convictions have occurred in 72 countries around the world, spanning high, middle and low-income contexts (Cameron & Bernard, 2019). The highest number of cases were reported in Russia, the United States, Ukraine and Canada, where criminalisation has been commonplace since the early 2000s, although between 2015 and 2018, fourteen countries criminalised HIV transmission or exposure for the first time.

More than 70 countries have HIV-specific laws (through which criminalisation of transmission or exposure occurs) whereas in others, general laws (such as those that criminalise the causing, or endangering, grievous or actual bodily harm) have been applied in cases of alleged HIV transmission or exposure. Some countries, and many US states, have enacted specific laws requiring pre-sexual disclosure of HIV status by people living with HIV, even when safe sex practices are employed.

In Australia, criminal laws are primarily the responsibility of individual states and territories, resulting in different treatment of HIV by the criminal law in

different parts of the country. Pre-sexual disclosure of HIV status is no longer legally mandated in any jurisdiction, however nondisclosure in circumstances where there is an appreciable risk of HIV transmission may risk criminal prosecution. Australia's only law that explicitly criminalised HIV transmission was repealed in 2015, however prosecution under general laws is possible in all states and territories. We are aware of 44 cases where HIV-related criminal prosecutions have occurred in the last 30 years, of which 29 have resulted in a finding of guilt, and 25 have resulted in an immediate term of imprisonment. Convictions for intentional or reckless HIV transmission have occurred in all states except Tasmania, and general endangerment laws in Victoria and South Australia have been used to convict in cases where HIV transmission either did not occur or could not be proven beyond reasonable doubt. Numerous high-profile HIV-related criminal cases have received extensive, and sometimes sensational and highly stigmatising, media coverage, resulting in widespread notoriety of the possibility of criminal prosecution for people living with HIV.

Numerous scholars, advocates and activists have argued that not only is the criminalisation of HIV transmission or exposure ineffective in reducing the scale of

the epidemic but that it actually hinders public health and HIV prevention efforts (Burriss & Cameron, 2008; Kazatchkine, Bernard, & Eba, 2015; Latham, 2013; McClelland et al., 2017). Harsono and colleagues reviewed empirical studies relating to HIV criminalisation in the United States and found that HIV exposure laws served to discourage most-at-risk populations from taking an HIV test while also increasing the hesitancy of people living with HIV to disclose their positive status to potential sex partners (Harsono, Galletly, O'Keefe, & Lazzarini, 2017). A study in England and Wales also found that people living with HIV were likely to hide their HIV positive status and engage in anonymous sex encounters to protect themselves from the possibility of being prosecuted for HIV transmission (Dodds, Bourne, & Weait, 2009). Further to this, evidence suggests that HIV criminalisation proceedings might also exacerbate the vulnerability of marginalised populations, such as sex workers and prisoners, by strengthening stigma and discrimination relating to HIV, which prevent people from accessing healthcare services (Ahmed, Kaplan, Symington, & Kismodi, 2011; Brown, Hanefeld, & Welsh, 2009).

The criminalisation of HIV impacts negatively on HIV prevention efforts as well as the quality of life of people living with HIV. Relevant studies have demonstrated how HIV criminalisation laws introduce a range of fears or anxieties for people living with HIV: fear of being prosecuted for unintended HIV transmission; fear of violence after disclosing their positive status to a partner; fear of being unable to provide evidence of their HIV positive status disclosure; and fear of the possibility that someone can use their disclosure against them by making a false claim to police (Adam, Elliott, Corriveau, & English, 2013; Dodds et al., 2009; Dodds & Keogh, 2006; Greene et al., 2019; Knight et al., 2018). In this context, there exists a clear potential for a negative impact on the broader mental health, wellbeing and quality of life for people living with HIV (Mykhalovskiy, 2015). Indeed, a recently published study in the United States identified an association between the profile of HIV criminalisation in the country and increased psychological distress (Breslow & Brewster, 2019). However, few other studies have examined the impact of HIV criminalisation laws on the wellbeing of people living with HIV and no such investigation has been published specific to the Australian context. In addition, the last five years have witnessed sustained media and political attention on matters pertaining to the criminalisation of HIV transmission, including successful, high-profile lobbying by police unions to introduce laws specifically relating to assault against emergency service personnel. These

laws allow for mandatory testing of people whose bodily fluids come into contact with police or other emergency service workers. While they are largely premised on inaccurate understandings regarding the potential for HIV transmission via saliva (e.g., spitting), critiques have argued that they serve to misinform the public about HIV transmission risks and, in turn, may exacerbate HIV-related stigma (Cameron, 2019). In this context, even though the application of criminalisation-related laws is uncommon in Australia, an enduring sense of surveillance of sexual practice, and of stigmatisation of people living with HIV more broadly, may contribute to diminished quality of life.

In this paper, we aim to determine whether criminalisation of HIV transmission or non-disclosure has an impact on the wellbeing of people living with HIV. In doing so, we examine whether people living with HIV feel that they understand the laws pertaining to criminalisation of HIV in Australia, develop and validate a scale measuring their levels of anxiety experienced in the context of the legal situation, establish variation in anxiety according to perceived social support, emotional wellbeing, resilience and perceptions or experiences of broader HIV-related stigma, as well as associations related to the gender and sexuality of participants, and relate this to consideration of external construct validity.

## Methods

Data for this analysis were obtained from the *HIV Futures 8* study, a cross-sectional survey of a large sample of people living with HIV in Australia. This was the eighth iteration of the HIV Futures study which has been conducted since 1997. Full details of the design and method used for this study have been published elsewhere (Power et al., 2017). In brief, between July 2015 and June 2016, data were collected from people living in Australia with diagnosed HIV via an anonymous, self-complete instrument that could be filled in online or using a booklet (pen-and-paper). The questionnaire included approximately 250 items related to health and wellbeing, finances and employment, ART use, HIV diagnosis and testing, drug use, sex and relationships. Measures used in the analysis for this paper are detailed below. In line with previous HIV Futures studies, HIV Futures 8 was advertised widely through HIV organisations, gay community media, HIV-related media, HIV and sexual health clinics, and relevant community events. Online survey promotion included posts to the email lists of PLHIV organisations, advertisements on websites and dating apps accessed by gay men and/or PLHIV and

advertisements on social media outlets such as Facebook. Ethics approval for the study was granted through the La Trobe University College of Science, Health and Engineering Human Ethics Committee (S15-100).

## Measures

### Demographic variables

Standard measures were used to record each participant's age, gender, level of educational attainment, employment status, income, residential location, sexual identity and relationship status. Speaking English as a first language was used as a proxy indicator for ethnicity. To measure financial security, we used a modified version of a relevant item from the Australian Household Income and Labour Dynamics (HILDA) survey (Wilkins, 2015), which assesses whether participants experience difficulties managing the cost of basic items for living. Resilience was assessed using the 10-item Connor-Davison scale (Connor & Davidson, 2003) in which participants were asked to indicate how true each statement was of them on a 4-point Likert scale (from "not true at all" to "true nearly all of the time") and where a higher score (maximum of 40) indicates higher resilience. Emotional well-being was assessed using the 3-item SF-36 subscale (RAND, 2016), which has been validated for use among people with HIV (Wu, Hays, Kelly, Malitz, & Bozzette, 1997). Social support was explored using a 10-item scale from the aforementioned HILDA study where ratings were captured on a seven-point Likert scale (from "strongly disagree" to "strongly agree"), with a possible range between -30 (perceived very little social support available to them) to 30.

Six bespoke items were created to assess participants' understanding and impact of HIV criminalisation. These were devised in consultation with an advisory board of organisations working with and for people living with HIV in Australia and subjected to piloting with members of the project community advisory board (including people living with HIV) prior to implementation of the survey. The items were: (1) "I understand the current laws in my state/territory regarding disclosure of my HIV status to sexual partners"; (2) "I am worried about disclosing my HIV status to sexual partners because of the current legal situation"; (3) "I am worried about disclosing my sexual practice to service providers because of the current legal situation"; (4) "Laws making it a criminal offence to knowingly expose a person to HIV would make me less likely to disclose my HIV status to a potential partner"; (5) "Laws making it a criminal offence to knowingly expose a person to HIV would make me more likely to utilise a condom during sex"; (6) "I do

not access services because I fear that I may be at risk of incriminating myself because of my sexual practices or drug use". Each item was answered on a 5-point Likert scale from "strongly agree" to "strongly disagree".

### Data analysis

We undertook an exploratory factor analysis with polychoric correlation matrices to establish a scale of HIV criminalisation-related anxiety. We used parallel analysis with 10,000 iterations after a principal components analysis to identify the appropriate number of factors and inspected individual item loadings and uniqueness's to remove poorly correlated items. We used iterative principal factors to estimate the final factor analysis model and used Cronbach's alpha to quantify the scale's reliability. We then used correlations (including point-biserial correlations for categorical correlates) to establish external construct validity and associations with wellbeing and demographic variables.

## Results

In total, 895 people completed the survey (online = 65%,  $n = 582$ ; on paper = 35%,  $n = 316$ ), aged 19–86 years (mean = 51). Most were men (90.5%,  $n = 804$ ) and were living in inner city/inner suburban areas (60.7%,  $n = 532$ ) as compared to outer suburban (12.4%,  $n = 109$ ) or rural/regional areas (26.9%,  $n = 236$ ). Smaller proportions of women participated (8.3%,  $n = 74$ ), although this is broadly in line with the epidemiology of HIV in Australia at the time. In relation to sexuality, most were gay men (78.7%,  $n = 697$ ), with smaller proportions of bisexual men (5.6%,  $n = 50$ ), heterosexual men (4.3%,  $n = 38$ ), lesbian/bisexual women (<1%,  $n = 6$ ), heterosexual women (7.3%,  $n = 65$ ) and those using a different term (2.3%,  $n = 21$ ). Most participants spoke English at home (97.7%,  $n = 854$ ) or as a first language (88.5%,  $n = 792$ ).

The majority of participants (79.1%) indicated they believed they understood current laws relating to disclosure of HIV status. One in three (33.1%) indicated they worried about disclosing HIV status to sexual partners due to these laws, while one in four (24.9%) worried about disclosure to service providers. Initial principal components analysis with parallel analysis suggested the presence of two factors, but the relevant exploratory factor analysis model suggested this was due to two items with poor loading on both factors and high uniquenesses (>85%). These two items were dropped and the subsequent parallel analysis suggested the presence of one factor. The final scale comprised four questions ( $\alpha = 0.75$ ) (Table 1). Each item loaded well onto the underlying factor.

**Table 1.** Four item “criminalisation-related anxiety” scale, alpha = 0.75.

Item	Loading	Uniqueness
I am worried about disclosing my HIV status to <u>sexual partners</u> because of the current legal situation	0.79	0.38
I am worried about disclosing my sexual practice to <u>service providers</u> because of the current legal situation	0.90	0.20
Laws making it a criminal offence to knowingly expose a person to HIV would make me <u>less likely</u> to disclose my HIV status to a potential partner	0.59	0.65
I do not access services because I fear that I may be at risk of incriminating myself because of my sexual practices or drug use	0.65	0.57

**Table 2.** Correlation between well-being and HIV criminalisation related anxiety.

Correlation between wellbeing and criminalisation-related anxiety*	
Emotional wellbeing	0.15 (0.06, 0.23)
Resilience	0.26 (0.18, 0.33)
Social support	0.29 (0.22, 0.37)
HIV stigma	-0.54 (-0.60, -0.47)

\*The scale was coded so higher scores represent lower levels of anxiety.

Higher criminalisation-related anxiety was associated with lower mental health-related quality of life ( $r = 0.15$ ), lower resilience ( $r = 0.26$ ), lower social support ( $r = 0.29$ ) and higher HIV stigma ( $r = -0.54$ ) (Table 2).

Women experienced lower criminalisation-related anxiety than men ( $r = 0.12$ ), as did heterosexual people compared to those who identified as gay ( $r = -0.12$ ), bisexual ( $r = -0.10$ ), or as preferring another term ( $r = -0.11$ ) (Table 3). Higher levels of anxiety about criminalisation were reported by people who did not identify as heterosexual people, men, people who did not speak English as a first language, and people who had experienced recent financial stress, as well as by people who reported sex with more than one partner ( $r = -0.12$ ). The highest levels of anxiety were reported in those aged 29 and younger.

## Discussion

Findings emerging from this analysis suggest that the criminalisation of HIV transmission, likely reinforced by ongoing media reporting around the issue, has contributed to considerable anxiety among people living with HIV in Australia. The highest levels of anxiety were reported by those who are often further marginalised on the basis of sexuality, ethnicity or financial distress. Research conducted in other countries indicates that criminalisation disproportionately impacts (by which we mean cases brought against) women (The Athena Network, 2009), people from minority ethnic communities and those from socially marginalised groups (Hasenbush, Miyashita, & Wilson, 2015). Our findings pertaining to anxiety about criminalisation largely mirror these previous observations, however it is worth noting that, in Australia, no HIV criminalisation cases have occurred where the accused is a cisgender

woman (there have been two cases involving trans women). That the highest levels of criminalisation related distress were observed among those with more than one sex partner likely reflects awareness of greater HIV-exposure possibility, while higher anxiety among those aged 29 and under may reflect the fact that those in this age range are more likely to be recently diagnosed and/or have less experience in discussion of HIV with sexual partners. It may also reflect greater sexual activity with new partners, with older men more likely to be in regular sexual partnerships.

There are several potential pathways through which criminalisation may increase anxiety among people living with HIV. At a general level, the existence of and reporting on criminalisation of HIV transmission may further exacerbate considerable stigma and discrimination directed towards people living with HIV. Reporting has often depicted those accused of criminal or otherwise “reckless” transmission in vilifying terms,

**Table 3.** Demographic variation in HIV criminalisation related anxiety.

Covariate	Point-biserial correlations (95% CI)
Gender	
Women	0.12 (0.04, 0.20)
Men	ref
Age	
<30	Ref
30–39	0.13 (-0.02, 0.29)
40–49	0.22 (0.04, 0.40)
50–59	0.22 (0.03, 0.41)
60–69	0.26 (0.10, 0.43)
70+	0.10 (-0.02, 0.22)
Sexuality	
Gay	-0.12 (-0.22, -0.02)
Bisexual	-0.10 (-0.19, -0.003)
Prefer another term (e.g., Queer)	-0.11 (-0.20, -0.03)
Heterosexual	ref
Sexual behaviour	
Reports casual sex or sex with more than one partner	-0.12 (-0.20, -0.03)
Reports sex with one regular partner	0.01 (-0.08, 0.09)
Does not report having sex	Ref
Region	
Rural/outer suburban	0.02 (-0.06, 0.09)
Urban/inner suburban	ref
Language spoken	
English not first language	-0.06 (-0.14, 0.02)
English as first language	Ref
Financial stress	
At least one economic problem in past year	-0.07 (-0.15, 0.01)
No economic problems in past year	ref

including “deceitful sexual predators” or hypersexual and dangerous figures (Mykhalovskiy, Hastings, Sanders, Hayman, & Bisailon, 2016; Speakman, 2017). Such portrayals will undoubtedly be received by communities of people living with HIV as further evidence of structural marginalisation and “othering”, perceptions that have been shown to contribute to poorer mental health outcomes (McKay, Thomas, Holland, Blood, & Kneebone, 2011).

It may also be the case that there are feelings of an increased burden of responsibility to ensure safer sex practices (rather than this responsibility being shared between sex partners) and this contributes to a sense of cognitive unease among people living with HIV, as indicated by qualitative studies of gay and bisexual men in the UK and Australia (Dodds et al., 2009; Persson, 2008; Philpot, Prestage, Ellard, Grulich, & Bavin-ton, 2018). It also seems evident that criminalisation negatively impacts the willingness of people living with HIV to talk to clinicians or nurses about their sexual practices or, in some contexts, to access healthcare in general (O’Byrne, Bryan, & Roy, 2013).

That a quarter of people living with HIV in this sample were worried about disclosing their HIV status to their healthcare provider given concerns about criminalisation is of significant concern and further reinforces an understanding that such action may indeed be counter-productive to personal and public health and well-being. There is scant evidence that criminalisation is effective on public health grounds (in terms of practising unsafe sex) and some evidence to indicate they are counterproductive (Harsono et al, 2017; Dodds et al, 2009). Criminalisation likely reinforces negative stereotypes and contributes to stigma associated with HIV (Weait, 2019), which itself impacts the health and wellbeing of people living with HIV, including their ability to have sex free from anxiety or concern regarding potential consequences at the point of their status disclosure to partners (Bourne, Hickson, Keogh, Reid, & Weatherburn, 2012). As has been noted by others (Dodds & Keogh, 2006), the principal aims of the criminal justice system are to reduce the prevalence of harmful behaviour, and to enforce societal norms, not to improve public health.

While most participants believed they understood the nature of laws pertaining to criminalisation of HIV, this may not necessarily mean that they do. To our knowledge, no such assessment currently exists in Australia but could be the subject of future research to ensure comprehension and the need for community engagement on this matter. As a cross-sectional survey recruited through community networks, this study is

not able to comment on causal relationships, nor can we determine if findings are representative of the total population of people living with HIV in Australia. This was, however, a large, nation-wide study that recruited a sample with a broad range of demographic characteristics. We also acknowledge the shortcomings in considering the ways in which ethnicity may shape the experience of criminalisation related anxiety, particularly in light of observations made by others as to the demonisation of people from culturally and linguistically diverse backgrounds in relation to HIV transmission in Australia (Persson & Newman, 2008). Future research on this topic should aim to capture a broader range of ethnicity markers to better inform analysis of criminalisation related anxiety among ethnically diverse groups.

## Conclusion

Most research has, understandably, focused on understanding the public health impact of criminalisation, with regards to uptake of HIV testing, condom use or HIV status disclosure. Considerably less research has focussed on the impact of criminalisation on the broader wellbeing of people living with HIV. These findings demonstrate a clear association between HIV criminalisation and poorer mental wellbeing and further challenge the credibility of continuing, disproportionate efforts to apply the law for management of sexual conduct in ways that exacerbate stigma and place an undue burden of responsibility on people living with HIV.

## Acknowledgements

This study would not be possible without our community partners, including (but not limited to): Living Positive Victoria, Positive Life NSW, Queensland Positive People, Positive Women Victoria, PozHet, Straight Arrows, Western Australian AIDS Council, AIDS Action Council (now Meridian), ACON, Thorne Harbour Health, Northern Territory AIDS and Hepatitis Council, Tasmanian Council on AIDS, Hepatitis and Related Diseases. *HIV Futures* relies on the time and commitment of people living with HIV; we are grateful for this support and value the leadership of people living with HIV in sustaining this project for more than 20 years. We also wish to acknowledge the contributions of Jayne Lucke, Gary Dowsett and Rachel Thorpe who contributed to the *HIV Futures 8* study.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## Funding

Data for this paper were drawn from *HIV Futures*, a periodic survey of health and wellbeing of people living with HIV funded entirely by the Australian Commonwealth Department of Health.

## ORCID

Adam Bourne  <http://orcid.org/0000-0001-7786-8981>  
 Anthony Lyons  <http://orcid.org/0000-0001-9569-6909>  
 Jennifer Power  <http://orcid.org/0000-0002-6566-3214>

## References

- Adam, B. D., Elliott, R., Corriveau, P., & English, K. (2013). Impacts of criminalization on the everyday lives of people living with HIV in Canada. *Sexuality Research and Social Policy*, 11(1), 39–49. <https://doi.org/10.1007/s13178-013-0131-8>
- Ahmed, A., Kaplan, M., Symington, A., & Kismodi, E. (2011). Criminalising consensual sexual behaviour in the context of HIV: Consequences, evidence, and leadership. *Global Public Health*, 6(Suppl 3), S357–S369. <https://doi.org/10.1080/17441692.2011.623136>
- The Athena Network. (2009). *10 reasons why criminalisation of HIV transmission or exposure harms women*.
- Bourne, A., Hickson, F., Keogh, P., Reid, D., & Weatherburn, P. (2012). Problems with sex among gay and bisexual men with diagnosed HIV in the United Kingdom. *BMC Public Health*, 12(1), 916. <https://doi.org/10.1186/1471-2458-12-916>
- Breslow, A. S., & Brewster, M. E. (2019). HIV is not a crime: Exploring dual roles of criminalization and discrimination in HIV/AIDS minority stress. *Stigma and Health*. <https://doi.org/10.1037/sah0000177>
- Brown, W., Hanefeld, J., & Welsh, J. (2009). Criminalising HIV transmission: Punishment without protection. *Reproductive Health Matters*, 17(34), 119–126. [https://doi.org/10.1016/S0968-8080\(09\)34477-8](https://doi.org/10.1016/S0968-8080(09)34477-8)
- Burris, S., & Cameron, E. (2008). The case against criminalization of HIV transmission. *Journal of American Medical Association*, 300(5), 578. <https://doi.org/10.1001/jama.300.5.578>
- Cameron, S. T. (2019). *The system is Broken: Audit of Australia's mandatory disease testing laws to test for HIV*.
- Cameron, S. T., & Bernard, E. J. (2019). *Advancing HIV justice 3: Growing the global movement against HIV criminalisation*.
- Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82. <https://doi.org/10.1002/da.10113>
- Dodds, C., Bourne, A., & Weait, M. (2009). Responses to criminal prosecutions for HIV transmission among gay men with HIV in England and Wales. *Reproductive Health Matters*, 17(34), 135–145. [https://doi.org/10.1016/S0968-8080\(09\)34475-4](https://doi.org/10.1016/S0968-8080(09)34475-4)
- Dodds, C., & Keogh, P. (2006). Criminal prosecutions for HIV transmission: People living with HIV respon. *International Journal of STD and AIDS*, 17(5), 315–318. <https://doi.org/10.1258/095646206776790114>
- Greene, S., Odhiambo, A. J., Muchenje, M., Symington, A., Cotnam, J., Dunn, K., Frank, M., Glum, S., Gormley, R., Ion, A., Nicholson, V., Shore, K., & Kaida, A. (2019). How women living with HIV react and respond to learning about Canadian law that criminalises HIV non-disclosure: ‘How do you prove that you told?’. *Culture, Health & Sexuality*, 21(10), 1087–1102. <https://doi.org/10.1080/13691058.2018.1538489>
- Harsono, D., Galletly, C. L., O’Keefe, E., & Lazzarini, Z. (2017). Criminalization of HIV exposure: A review of empirical studies in the United States. *AIDS and Behavior*, 21(1), 27–50. <https://doi.org/10.1007/s10461-016-1540-5>
- Hasenbush, A., Miyashita, A., & Wilson, B. D. M. (2015). *HIV criminalization in California: Penal implications for people living with HIV/AIDS*.
- Hazatchkine, C., Bernard, E., & Eba, P. (2015). Ending overly broad HIV criminalization: Canadian scientists and clinicians stand for justice. *Journal of the International AIDS Society*, 18(1), 20126. <https://doi.org/10.7448/IAS.18.1.20126>
- Knight, R., Krusi, A., Carson, A., Fast, D., Shannon, K., & Shoveller, J. (2018). Criminalization of HIV non-disclosure: Narratives from young men living in Vancouver, Canada. *PloS One*, 13(7), e0201110. <https://doi.org/10.1371/journal.pone.0201110>
- Latham, S. R. (2013). Policy and politics: Time to decriminalize HIV status. *Hastings Center Report*, 43(5), 12–13. <https://doi.org/10.1002/hast.205>
- McClelland, A., French, M., Mykhalovskiy, E., Gagnon, M., Manning, E., Peck, R., Clarke, C., & McCaskell, T. (2017). The harms of HIV criminalization: Responding to the ‘association of HIV diagnosis rates and laws criminalizing HIV exposure in the United States’. *AIDS*, 31(13), 1899–1900. <https://doi.org/10.1097/QAD.0000000000001570>
- McKay, F. H., Thomas, S. L., Holland, K., Blood, R. W., & Kneebone, S. (2011). “AIDS Assassins”: Australian media’s portrayal of HIV-positive refugees who deliberately infect others. *Journal of Immigrant & Refugee Studies*, 9(1), 20–37. <https://doi.org/10.1080/15562948.2011.547824>
- Mykhalovskiy, E. (2015). The public health implications of HIV criminalization: Past, current, and future research directions. *Critical Public Health*, 25(4), 373–385. <https://doi.org/10.1080/09581596.2015.1052731>
- Mykhalovskiy, E., Hastings, C., Sanders, C., Hayman, M., & Bisailon, L. (2016). ‘Callous, cold and deliberately duplicitous’: Racialization, immigration and the representation of HIV criminalization in Canadian mainstream newspapers. York University and University of Toronto.
- O’Byrne, P., Bryan, A., & Roy, M. (2013). HIV criminal prosecutions and public health: An examination of the empirical research. *Medical Humanities*, 39(2), 85–90. <https://doi.org/10.1136/medhum-2013-010366>
- Persson, A. (2008). Sero-silence and sero-sharing: Managing HIV in serodiscordant heterosexual relationships. *AIDS Care*, 20(4), 503–506. <https://doi.org/10.1080/09540120701787487>
- Persson, A., & Newman, C. (2008). Making monsters: Heterosexuality, crime and race in recent Western media

- coverage of HIV. *Sociology of Health and Illness*, 30(4), 632–646. <https://doi.org/10.1111/j.1467-9566.2008.01082.x>
- Philpot, S. P., Prestage, G., Ellard, J., Grulich, A. E., & Bavinton, B. R. (2018). How do gay serodiscordant couples in Sydney, Australia negotiate undetectable viral load for HIV prevention? *AIDS and Behavior*, 22(12), 3981–3990. <https://doi.org/10.1007/s10461-018-2247-6>
- Power, J., Brown, G., Lyons, A., Thorpe, R., Dowsett, G. W., & Lucke, J. (2017). HIV futures 8: Protocol for a repeated cross-sectional and longitudinal survey of people living with HIV in Australia. *Frontiers in Public Health*, 5, 50–50. <https://doi.org/10.3389/fpubh.2017.00050>
- RAND. (2016). *36-item short form survey, SF-36*.
- Speakman, E. R. (2017). Constructing an “HIV-killer”: HIV non-disclosure and the techniques of vilification. *Deviant Behavior*, 38(4), 392–405. <https://doi.org/10.1080/01639625.2016.1197010>
- Weait, M. (2019). Limit cases: How and why we can and should decriminalise HIV transmission, exposure, and non-disclosure. *Medical Law Review*, 27(4), 576–596. <https://doi.org/10.1093/medlaw/fwz030>
- Wilkins, R. (2015). *The household, income, labour dynamics in Australia survey: Selected findings from waves 1 to 12*. [https://www.melbourneinstitute.com/downloads/hilda/Stat\\_Report/sta\\_treport\\_2015.pdf](https://www.melbourneinstitute.com/downloads/hilda/Stat_Report/sta_treport_2015.pdf)
- Wu, A. W., Hays, R. D., Kelly, S., Malitz, F., & Bozzette, S. A. (1997). Applications of the medical outcomes study health-related quality of life measures in HIV/AIDS. *Quality of Life Research*, 6(6), 531–554. <https://doi.org/10.1023/A:1018460132567>