INQUIRY INTO IMPACT OF THE REGULATORY FRAMEWORK FOR CANNABIS IN NEW SOUTH WALES

Organisation: Drug Policy Modelling Program, SPRC, UNSW

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Inquiry into the impact of the regulatory framework for cannabis in New South Wales

Thank you for the opportunity to present a written submission for the Inquiry into the impact of the regulatory framework for cannabis in NSW.

The Drug Policy Modelling Program (DPMP), at the Social Policy Research Centre UNSW Sydney is the leading drug policy research and practice program in Australia. Our mission is to improve government decision-making in relation to alcohol and other drugs. DPMP has conducted extensive local and international research on cannabis regulation and the design, impacts, strengths and weaknesses of cannabis regulation policy options. This includes in-depth research over two years with people who grow cannabis in the ACT following the introduction of the Drugs of Dependence (Personal Cannabis Use) Amendment Act 2019 (that allows possession of small amounts of cannabis and cultivation of cannabis plants), and a review of regulation for the Swiss government to assist them in developing new cannabis regulation (Barrett et al., 2022; Ritter et al., 2022; Ritter et al., 2023).

Current and former members of DPMP (Keelin O'Reilly and Michala Kowalski) have also been deeply involved in the Global Cannabis Cultivation Research Consortium (GCCRC) and in rolling out the global survey of cannabis cultivators in Australia. Dr Vendula Belackova who is a Senior Adjunct Lecturer at DPMP, has conducted extensive research into the relationships between cannabis market participants, home cannabis cultivation, and cannabis social clubs, covering jurisdictions like New South Wales, Czech Republic, Spain, and United States (Florida).

Drawing from this wealth of applied research we support the suggested amendments to the Drug Misuse and Trafficking Amendment (Regulation of Personal Adult Use of Cannabis) Bill 2023 that would permit adults to cultivate up to six cannabis plants, 'possess small amounts of cannabis for personal use' (with 'small amounts' defined as 50g outside of their residence) and to gift small amounts of cannabis (referred to in this submission as social supply). This is sensible and practical policy that reduces inequities that result from current policing of cannabis but also avoids the hazards of a commercial for-profit cannabis market including increased consumption (Cerdá et al., 2020; Kim et al., 2021; Miller et al., 2017; Wallace et al., 2020) and harms (Athanassiou et al., 2022; Masonbrink et al., 2021; Wang et al., 2022). It also permits (otherwise law-abiding) citizens to self-supply cannabis with the features they prefer (minimising intoxication, sedation and physical harm) while avoiding interaction with illegal markets and products (Belackova et al., 2020).

We focus our submission on four key points:

- 1. Legalising cannabis possession will address inequities in policing and legal consequences for drug use speaking to (d) the impact of the regulatory framework for cannabis on young people, the health system, personal health, employment, road safety, crime and the criminal justice system; and (e) the impact on Aboriginal, LGBTIQA+, regional, multicultural and lower socioeconomic communities.
- 2. **Benefits and considerations for regulating home cultivation and social supply**, speaking to (g) the provisions of the Drug Misuse and Trafficking Amendment (Regulation of Personal Adult Use of Cannabis) Bill 2023
- 3. How the suggested legislation brings NSW in line with approaches towards cannabis in other jurisdictions, speaking to (f) alternative approaches to the regulatory framework for cannabis in other jurisdictions
- 4. **Net social benefit analyses of different cannabis regimes**, speaking to (c) the historical, current and future financial cost of cannabis prohibition to the Government and the economy.

We look forward to New South Wales making progress on cannabis regulation. It is an area requiring long-overdue policy reform, in light of the substantial harms of the current recreational cannabis policies across Australia.

Yours sincerely,

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Drug Policy Modelling Program, UNSW submission to the Inquiry into the impact of the regulatory framework for cannabis in New South Wales

1. Legalising cannabis possession will address inequities in policing and legal consequences for drug use

We welcome the provisions in Schedule 1 of the *Drug Misuse and Trafficking Amendment Bill* (referred to hereon in as the *Cannabis Bill*) that would make it lawful for an adult to possess small quantities of cannabis for personal use. The current criminalisation of cannabis use and possession in NSW can result in a criminal conviction for drug possession that follows people through life, negatively impacting their future employment, education prospects, relationships and even the ability to secure finance for housing and travel (Lenton et al., 2000; Potter & Wells, 2021; Shanahan et al., 2016). Research has also consistently shown that decriminalisation of possession and use of cannabis does not increase consumption unlike provision through a legal commercial market (Scheim et al., 2020), and the government's own research demonstrates that prohibition does not deter cannabis use (Weatherburn & Jones, 2001).

NSW currently has a diversionary scheme, the Cannabis Caution Scheme, that allows police to use discretion to issue cautions instead of charges for personal use and possession of cannabis. Despite this, arrests and prosecution for small scale cannabis offences have continued. Arrests for cannabis represent 49% of all arrests for drug use and/or possession in NSW, with 87,373 arrests for the possession and/or use of cannabis in NSW between 2017 and 2021 (BOSCAR, 2022). Rates of cannabis possession arrests have been found to be disproportionately higher in NSW compared to other jurisdictions that implemented decriminalisation in law (de jure) rather than relying on law enforcement to use discretion (Belackova et al., 2017). This represents a significant amount of NSW justice system resources which could be redirected towards serious crimes, including violent offences or large-scale drug trafficking, which would align with NSW Police Force's drug-related priority areas (NSW Police Force, 2024).

Data also shows that discretion for cannabis possession is unevenly applied. Aboriginal people and those who reside in the Hunter and Western Sydney are less likely to receive a caution under the Cannabis Caution Scheme and so more likely to receive a criminal charge (Baker & Goh, 2004; Cronshaw, 2020; Taperski & Rahman, 2023). Previous eligibility criteria that excluded people with prior convictions and required admitting to the offence (of possession) also made the Cannabis Caution Scheme less equitable for Aboriginal people. This is reflected in the data: between 2013 and 2017 more than 80% of Aboriginal people found in possession of cannabis in NSW were pursued through the courts compared with only 52% of non-Aboriginal people (McGowan & Knaus, 2020). The provisions provided under Schedule 1 of the *Cannabis Bill* that permit adult possession of small amounts of cannabis are therefore positive because they provide a level playing field in law, and remove the potential to accuse police of racialised or discriminatory policing.

2. Benefits and considerations for regulating home cultivation and social supply

The Cannabis Bill permits self-supply of cannabis through the sanctioning of home cultivation and the gifting of small quantities of cannabis to other adults. These are positive amendments to the current system of cannabis regulation in NSW.

Research has consistently found self-supply of cannabis as a low-risk practice that can yield several benefits to consumers including the ability to avoid interaction with illegal markets and suppliers, produce low cost and high quality (often described as milder, healthier and more organic) cannabis (Belackova, 2020), gain greater knowledge about products (including growing techniques, plant effects and THC/CBD content where genesis of seeds is known), and avoid potential contaminants and through the enjoyment of gardening (Aguiar & Musto, 2022; Decorte, 2010; Pardal, 2018; Potter et al., 2015).

Indeed, our own research with cannabis cultivators in Canberra found similar positive benefits. During 2021-2022 we interviewed 30 people who used and/or grew cannabis in the ACT and conducted an additional 10 photo elicitation interviews with backyard cannabis growers. Benefits of self-supply described by participants included avoiding "dodgy dealers" (i.e. they could trust the supply chain rather than buying unknown products and avoid risks with coming into contact with criminal organisations), being able to avoid consumption of chemicals (particularly plant growth regulators) and other pesticides which were viewed as harmful to health, and the ability to better find strains of cannabis to match medicinal or other needs. Additionally, we found a small cohort of people who continued to grow cannabis after ceasing use due to the enjoyment of home growing as a leisure activity (Barrett et al., forthcoming).

Many we spoke to grew and/or consumed cannabis for a range of medicinal purposes including cancer treatment, pain relief, stress relief and insomnia, and noted difficulties with finding prescribers and the expense of the medicinal system. Home growing was seen as providing a reliable and affordable source of medicinal cannabis. Growing organically was particularly appreciated by those who were growing for medicinal purposes (Barrett et al., forthcoming).

Taking a macro view, allowing home cultivation and social supply is a sensible policy that is likely to yield additional benefits to NSW. Work by Dr Belackova and others has found home cultivation and social supply avoids the hazards of commercialisation and for-profit models of cannabis supply (Belackova et al., 2019; Decorte, 2010, 2018; Pardal et al., 2023). As shown in the experiences of the United States and Canada, commercialisation of cannabis supply with limited regulatory guardrails can have unintended negative consequences at the population level, including increasing rates of cannabis use disorder among adults and cannabis-related hospital presentations (Hall & Lynskey, 2020; Myran et al., 2023; Shi & Liang, 2020).

Secondly, the black market for cannabis in NSW has links to organised crime including international crime syndicates (Australian Criminal Intelligence Commission, 2022; Cormack, 2020). Allowing self-supply and gifting of home grown surplus cannabis can potentially reduce the size of the illicit market by shifting consumption away from black market purchases (Belackova et al., 2018; Belackova & Stefunkova, 2018). Although the impact is likely to be small, such an effect can be more pronounced when sharing of home-grown cannabis is authorised (as is proposed in Schedule 1[4]d) (Belackova et al., 2018). It is worth noting that the

only person we interviewed in Canberra who grew cannabis for commercial profit opposed cannabis reform in ACT as they perceived it as a threat to their business model.

An analysis by Dr Belackova et al in 2019 found at least 27 jurisdictions internationally, including Australia, where approaches to home cultivation have been adopted (Belackova et al., 2019) (since this work the number has increased with approximately 8 other countries such as Malta, Germany, Thailand and the ACT in Australia all introducing laws to allow for cannabis possession and cultivation). There is no preferred model for the specifics of cannabis home grown cultivation – instead, regulation varies between countries in terms of the number of plants allowed (per person and per property), threshold quantities, sharing produce and sanctions for non-authorised behaviours like selling cannabis or distribution to minors (Belackova et al., 2019; Decorte & Potter, 2022). However, the experiences of growers in Canberra yield important considerations for policy makers in NSW and support the approach taken in the *Cannabis Bill* currently being considered.

The people we spoke to in Canberra found the restrictions around the number of plants (which in the ACT is two per person up to a maximum of four per household) were not sufficient to ensure seedlings survived into adulthood and to ensure cultivation of a female plant (as the sex that produces the cannabis bud) as sexing of plants can only take place once plants are relatively mature. Based on the evidence from overseas, scholars suggest that allowing a maximum of six plants per person (regardless of maturity of plants) is preferable for home growing regimes (Decorte, 2018) and is what is in place in many other jurisdictions including most US states and Uruguay (Belackova et al., 2019).

We are pleased to see no distinctions made in the *Cannabis Bill* between different forms of cultivation (i.e. growing indoors, outdoors or with the use of heat lamps, hydroponics or other interventions), no thresholds for plant yield and also in the allowance of 'gifting' of small quantities of cannabis to other adults. These are all material improvements to existing legislation in the ACT. We found restrictions in the ACT legislation that prevent growing with 'artificial' modes of cultivation discriminated against people who live in apartments as this was readily interpreted as a ban on all indoor cultivation. ACT law also did not account for practicalities of growing in the Canberra climate where there are frosts in winter and gardeners routinely use heat lamps for seedlings including tomatoes and capsicums. The one person we spoke to who grew hydroponically opted to do so to avoid unwanted attention and potential discrimination from neighbours (Barrett et al, forthcoming).

Specifying that threshold limits for personal possession at 50g 'outside the adult's residence' (Schedule 1[4]c) is also positive as it prevents a person from potential trafficking offences where their legal plants at their residence have produced yields higher than 50g. As noted by our research, cannabis is similar to tomatoes whereby ripe product can only be harvested over a few weeks meaning at certain times of the growing season, cultivators are likely to possess more than 50g. We note that other jurisdictions that have successfully implemented reforms allowing small-scale cannabis cultivation provide provisions in law for the courts to determine whether cultivation is for personal or criminal use (for instance in Brazil and Chile) (Belackova et al., 2020), as is currently the case in NSW (Judicial Commission of New South Wales, 2024).

3. How the suggested legislation brings NSW into line with approaches towards cannabis in other jurisdictions

We have summarised information from other jurisdictions in Table 1.

The provisions under Schedule 1 of the *Cannabis Bill* that allow cultivation of cannabis, would bring NSW in line with the ACT, South Australia and Northern Territory (noting that in the latter two, a medicinal license is required for home-growing).

While all states and territories now have non-criminal responses available for the use and possession of small quantities of cannabis, these are limited in application, with many people still charged with cannabis personal possession offences. The removal of discretion in the proposed *Cannabis Bill* is in line with Queensland, SA, Tasmania, and the ACT.

Table 1. Summary of non-criminal responses available in each jurisdiction for the use and possession of small quantities of cannabis, April 2024

S/T	Non-criminal	Home	Discretionary? ¹	Number of	Criminal	Maximum
	response	growing		times eligible	penalty	criminal
	available?	permitted?		for non-	possible for	penalty
				criminal	small	includes
				response?	quantities?2	imprisonment?
Vic	/	No	✓	2	✓	×
QLD	~	No	×	3	✓	✓
SA	✓	Yes ³	×	n.a.	✓	×
WA	✓	No	✓	1	~	✓
Tas	✓	No	×	3	✓	~
NT	~	Yes ³	~	n.a.	~	V 4
ACT 5	✓	Yes	×	n.a.	X	×

Notes:

^{1.} All programs require the apprehending officer to exercise discretion about whether the possession was intended for personal use. This column indicates whether there is discretion beyond this, i.e. whether the officer can choose to issue a criminal charge if the individual meets all eligibility criteria.

^{2.} This column indicates whether possession of small quantities remains an offence associated with criminal penalties in the legislation.

^{3.} With a medicinal licence

^{4.} Imprisonment possible only if possession in a public space.

^{5.} In the ACT there are no penalties associated with using or possessing small quantities of cannabis for adults (a diversion scheme is offered for people under 18).

4. Net Social Benefit analyses of different cannabis regimes

The substantial social costs associated with cannabis in Australia are well-known (valued at \$4.4 billion in 2015/16) (Whetton et al., 2020). If we applied CPI to that figure, it would represent \$5.34 billion in 2022/23. The question is whether the proposed *Cannabis Bill* would reduce those costs.

Economic analyses of different cannabis regulatory regimes are fraught. Economists differ in what cost measures they include or exclude: for example, economic evaluations vary in their accounting of costs to regulators, tax revenue, lost productivity due to involvement in legal process and/or incarceration, and costs associated with the operation of black markets (Belackova et al., 2020). Further, it can be challenging to form parameters and predictions for data on a presumed legislative regime that is yet to exist (Belackova et al., 2020). There are no economic models that mimic the proposed *Cannabis Bill* hence it is not possible to estimate the economic impact of the proposed reform.

We have however completed past research comparing the current NSW cannabis policy settings (a limited cannabis cautioning scheme) with a legalised-regulated model of cannabis with public-health based restrictions on availability and advertising (Shanahan & Ritter, 2014). We conducted a cost-benefit analysis comparing these two policies. The regulated-legalised model took into account savings in police costs as well as increased cannabis consumption (and associated costs of health harms) under a legalised regime. When revenue from the sale of cannabis (taxation income) was excluded, there was no statistically significant difference in the Net Social Benefit between the two models.² While not direct evidence for the proposed *Cannabis Bill* it suggests that there would be no economic disadvantage to the proposed decriminalisation of personal use of cannabis, and provisions for home-growing.

¹ Calculated using RBA Inflation calculator, which notes that the total change in cost is 21.3 per cent, over 7 financial years from 2015/2016 to 2022/23, at an average annual inflation rate of 2.8 per cent. https://www.rba.gov.au/calculator/financialYearDecimal.html

² Median Net Social Benefit per annum [in 2007] for the status quo was \$293.5 million AUD (\$207.9 to \$379.0 million). The Net Social Benefit for the legalised-regulated model was \$228.7 million AUD (\$154.2 to \$314.5 million). When taxation revenue is included within the legalised-regulated model, there is significant economic advantage to that model.

References

- Aguiar, S., & Musto, C. (2022). The Regulation Backyard: Home Growing Cannabis in Uruguay. Contemporary Drug Problems, 00914509221100925. https://doi.org/10.1177/00914509221100925
- Athanassiou, M., Dumais, A., Zouaoui, I., & Potvin, S. (2022). The clouded debate: A systematic review of comparative longitudinal studies examining the impact of recreational cannabis legalization on key public health outcomes. *Frontiers in psychiatry, 13*.
- Australian Criminal Intelligence Commission. (2022, 19 January). Six charged during record cannabis seizure worth nearly \$67 million Dandry https://www.acic.gov.au/media-centre/media-releases-and-statements/six-charged-during-record-cannabis-seizure-worth-nearly-67-million-dandry
- Baker, J., & Goh, D. (2004). The Cannabis Cautioning Scheme three years on: An impementation and outcome evaluation. NSW Bureauof Crime Statistics and Research (BOSCAR). https://www.bocsar.nsw.gov.au/Publications/General-Series/r54.pdf
- Barrett, L., Kearnes, M., McLauchlan, L., Lancaster, K., Mellor, R., & Ritter, A. (forthcoming). Regulating the plant versus regulating the drug: Learning from backyard cannabis cultivation in the Australian Capital Territory.
- Barrett, L., Mellor, R., Ritter, A., McLauchlan, L., & Kearnes, M. (2022). Navigating the grey: Experiences of incremental cannabis reform in Australia [https://doi.org/10.1111/dar.13518]. Drug and Alcohol Review, 41(7), 1621-1629. https://doi.org/https://doi.org/10.1111/dar.13518
- Belackova, V. (2020). "The Good, the Bad, and the Ugly Weed": How Consumers in Four Different Policy Settings Define the Quality of Illicit Cannabis. *Contemporary Drug Problems*, 47(1), 43-62. https://doi.org/10.1177/0091450919897658
- Belackova, V., Brandnerova, M., & Vechet, D. (2018). How Close to the "Honeypot?" A Comparative Analysis of Cannabis Markets Under Two Different Policies Toward Personal Cultivation. *International criminal justice review, 28*(3), 206-225.
- Belackova, V., Ritter, A., Shanahan, M., & Hughes, C. E. (2017). Assessing the concordance between illicit drug laws on the books and drug law enforcement: Comparison of three states on the continuum from "decriminalised" to "punitive". *International Journal of Drug Policy, 41*, 148-157. https://doi.org/10.1016/j.drugpo.2016.12.013
- Belackova, V., Roubalova, M., & van de Ven, K. (2019). Overview of "home" cultivation policies and the case for community-based cannabis supply. *International Journal of Drug Policy*, 71, 36-46.
- Belackova, V., & Stefunkova, M. (2018). Interpreting the Czech drug decriminalization: The glass is half full Response to Cerveny, J., Chomynova, P., Mravcik, V., & van Ours, J.C. (2017). Cannabis decriminalization and the age of onset of cannabis use. *International Journal of Drug Policy, 52*, 102-105. https://doi.org/10.1016/j.drugpo.2017.10.010
- Belackova, V., van de Ven, K., & Roubalova, M. (2020). "More than just counting the plants" different home cannabis cultivation policies, cannabis supply contexts and approaches to their evaluation. In T. Decorte, S. Lenton, & C. Wilkins (Eds.), *Legalizing Cannabis: Experiences, Lessons and Scenarios*. Routledge. https://www.routledge.com/Legalizing-Cannabis-Experiences-Lessons-and-Scenarios/Decorte-Lenton-Wilkins/p/book/9781032174044
- BOSCAR. (2022). Drug possession recorded by the NSW Police Force: 2017 to 2021. NSW Bureauof Crime Statistics and Research (BOCAR).

 https://www.bocsar.nsw.gov.au/Documents/Landing_Pages/2021_Dec_Drug%20offences%20infographic.pdf

- Cerdá, M., Mauro, C., Hamilton, A., Levy, N. S., Santaella-Tenorio, J., Hasin, D., Wall, M. M., Keyes, K. M., & Martins, S. S. (2020). Association Between Recreational Marijuana Legalization in the United States and Changes in Marijuana Use and Cannabis Use Disorder From 2008 to 2016. *JAMA Psychiatry*, 77(2), 165-171. https://doi.org/10.1001/jamapsychiatry.2019.3254
- Cormack, L. (2020, 14 April 2020). Bikie president and two others charged after police raid cannabis farm near Mudgee. *Sydney Morning Herald*,.

 https://www.smh.com.au/national/nsw/bikie-president-and-two-others-charged-after-police-raid-cannabis-farm-near-mudgee-20200414-p54jmu.html
- Cronshaw, D. (2020, 20 December). NSW crime data shows Cannabis Cautioning Scheme has gone to pot and become a 'class war'. *Newcastle Herald*.

 https://www.newcastleherald.com.au/story/7055185/cannabis-use-class-war-between-the-hunter-and-wealthy-sydney-areas/
- Decorte, T. (2010). The case for small-scale domestic cannabis cultivation. *International Journal of Drug Policy, 21*(4), 271-275. https://doi.org/https://doi.org/10.1016/j.drugpo.2010.01.009
- Decorte, T. (2018). Regulating Cannabis: A Detailed Scenario for a Nonprofit Cannabis Market.

 A. Publishing.
- Decorte, T., & Potter, G. (2022). The Global Cannabis Cultivation Research Consortium (GCCRC): a transnational online survey of cannabis growers (Monitoring Drug Use in the Digital Age: Studies in Web Surveys, Issue. European Monitoring Centre for Drugs and Drug Addiction. https://www.emcdda.europa.eu/publications/insights/web-survey-cannabis-growers_en
- Hall, W., & Lynskey, M. (2020). Assessing the public health impacts of legalizing recreational cannabis use: the US experience. *World Psychiatry*, 19(2), 179-186.
- Judicial Commission of New South Wales. (2024). Sentencing Bench Book Drug Misuse and Trafficking Act 1985 (NSW) Offences. Judicial Commission of New South Wales. https://www.judcom.nsw.gov.au/publications/benchbks/sentencing/drug_misuse_and_trafficking_act.html
- Kim, J. H., Weinberger, A. H., Zhu, J., Barrington-Trimis, J., Wyka, K., & Goodwin, R. D. (2021). Impact of state-level cannabis legalization on poly use of alcohol and cannabis in the United States, 2004–2017. *Drug and alcohol dependence*, *218*, 108364.
- Lenton, S., Humeniuk, R., Heale, P., & Christie, P. (2000). Infringement versus conviction: the social impact of a minor cannabis offence in South Australia and Western Australia. *Drug and Alcohol Review, 19*(3), 257-264.

 https://doi.org/https://doi.org/10.1080/713659365
- Masonbrink, A. R., Richardson, T., Hall, M., Catley, D., & Wilson, K. (2021). Trends in adolescent cannabis-related hospitalizations by state legalization laws, 2008–2019. *Journal of Adolescent Health*, 69(6), 999-1005.
- McGowan, M., & Knaus, C. (2020, 10 June). NSW police pursue 80% of Indigenous people caught with cannabis through courts. *The Guardian*.

 https://www.theguardian.com/australia-news/2020/jun/10/nsw-police-pursue-80-of-indigenous-people-caught-with-cannabis-through-courts
- Miller, A. M., Rosenman, R., & Cowan, B. W. (2017). Recreational marijuana legalization and college student use: Early evidence. SSM-Population Health, 3, 649-657.
- Myran, D. T., Imtiaz, S., Konikoff, L., Douglas, L., & Elton-Marshall, T. (2023). Changes in health harms due to cannabis following legalisation of non-medical cannabis in Canada in

- context of cannabis commercialisation: A scoping review. *Drug and Alcohol Review,* 42(2), 277-298. https://doi.org/https://doi.org/10.1111/dar.13546
- NSW Police Force. (2024). *National Drug Strategy*.

 https://www.police.nsw.gov.au/crime/drugs_and_alcohol/drugs/drug_pages/national_drug_strategy
- Pardal, M. (2018). "The difference is in the tomato at the end": Understanding the motivations and practices of cannabis growers operating within Belgian Cannabis Social Clubs. *International Journal of Drug Policy, 56, 21-29.* https://doi.org/https://doi.org/10.1016/j.drugpo.2018.02.016
- Pardal, M., Kilmer, B., d'Auria, S., Strabel, T., Galimberti, S., Hoorens, S., Decorte, T., & Senator, B. (2023). *Alternative to profit-maximising commercial models of cannabis supply for non-medical use*. RAND Europe. https://www.rand.org/pubs/research_reports/RRA2190-1.html
- Potter, G. R., Barratt, M. J., Malm, A., Bouchard, M., Blok, T., Christensen, A.-S., Decorte, T., Frank, V. A., Hakkarainen, P., & Klein, A. (2015). Global patterns of domestic cannabis cultivation: Sample characteristics and patterns of growing across eleven countries. In *Friendly business* (pp. 163-196). Springer.
- Potter, G. R., & Wells, H. (2021). More harm than good? Cannabis, harm and the misuse of drugs act. *Drugs and Alcohol Today, 21*(4), 277-288. https://doi.org/10.1108/DAT-09-2021-0047
- Ritter, A., Barrett, L., O'Reilly, K., Wilkinson, C., Belackova, V., & Room, R. (2022). Final Report:

 Lessons learnt from alcohol and tobacco for cannabis regulation. Swiss Federal Office
 of Public Health.

 https://www.bag.admin.ch/dam/bag/en/dokumente/npp/forschungsberichte/forschungsberichte-cannabis/lessons-for-cannabis-regulation.pdf.

 Cannabis-regulation.pdf
- Ritter, A., Lancaster, K., McLauchlan, L., Barrett, L., & Kearnes, M. (2023). As many states weigh legalising cannabis, here's what they can learn from the struggles of growers in Canberra. T. Conversation. https://theconversation.com/as-many-states-weigh-legalising-cannabis-heres-what-they-can-learn-from-the-struggles-of-growers-in-canberra-212009
- Scheim, A. I., Maghsoudi, N., Marshall, Z., Churchill, S., Ziegler, C., & Werb, D. (2020). Impact evaluations of drug decriminalisation and legal regulation on drug use, health and social harms: a systematic review. *BMJ Open, 10*(9), e035148. https://doi.org/10.1136/bmjopen-2019-035148
- Shanahan, M., Hughes, C., & McSweeney, T. (2016). Australian police diversion for cannabis offences: Assessing program outcomes and cost-effectiveness (Monograph Series No.66, Issue. Australian Institute of Criminology (AIC). https://www.aic.gov.au/sites/default/files/2020-05/monograph-66.pdf
- Shanahan, M., & Ritter, A. (2014). Cost Benefit Analysis of Two Policy Options for Cannabis: Status Quo and Legalisation. *PLOS ONE*, 9(4), e95569. https://doi.org/10.1371/journal.pone.0095569
- Shi, Y., & Liang, D. (2020). The association between recreational cannabis commercialization and cannabis exposures reported to the US National Poison Data System. *Addiction*, 115(10), 1890-1899. https://doi.org/10.1111/add.15019
- Taperski, A., & Rahman, S. (2023). Why are Aboriginal adults less likely to receive cannabis cautions? (Crime and Justice Bulletin,, Issue. NSW Bureauof Crime Statistics and Research (BOSCAR). https://www.bocsar.nsw.gov.au/Publications/CJB/CJB258-Report-Cannabis-cautioning-2023.pdf

- Wallace, G., Parnes, J., Prince, M., Conner, B., Riggs, N., George, M., & Shillington, A. (2020).

 Associations between marijuana use patterns and recreational legislation changes in a large Colorado college student sample. *Addiction Research & Theory, 28*(3), 211-221.
- Wang, G. S., Buttorff, C., Wilks, A., Schwam, D., Metz, T. D., Tung, G., & Pacula, R. L. (2022). Cannabis legalization and cannabis-involved pregnancy hospitalizations in Colorado. *Preventive Medicine*, *156*, 106993.
- Weatherburn, D., & Jones, C. (2001). Does prohibition deter cannabis use? Crime and Justice Bulletin, NSW Bureau of Crime Statistics and Research, , 58.
- Whetton, S., Tait, R. J., Chrzanowska, A., Donnelly, N., McEntee, A., Mukhtar, A., Zahra, E., Campbell, G., Degenhardt, L., Dey, T., Abdul Halim, S., Hall, W., Makate, M., Norman, R., Peacock, A., Roche, A., & Allsop, S. (2020). *Quantifying the Social Costs of Cannabis Use to Australia in 2015/16*. National Drug Research Institute, Curtin University, . https://ndri.curtin.edu.au/ndri/media/documents/publications/T287.pdf