SUBMISSION

INQUIRY INTO THE USE OF CANNABIS IN VICTORIA

SEPTEMBER 2020

LIVING POSITIVE VICTORIA & THE NATIONAL ASSOCIATION OF PEOPLE WITH HIV AUSTRALIA

ACKNOWLEGEMENT OF TRADITIONAL OWNERS

Living Positive Victoria and the National Association of People with HIV Australia acknowledge the Traditional Owners of the Lands and Waterways where we work, live and rest. We pay our respects to Aboriginal and Torres Strait Islander Peoples, to their Elders past and present.

ABOUT

Living Positive Victoria is a not-for-profit, community-based organisation representing all people living with HIV in Victoria since 1988. Living Positive Victoria is committed to the advancement of human rights and wellbeing of all people living with HIV.

Founded in 1989, The National Association of People with HIV Australia (NAPWHA) is Australia's peak non-government organisation representing community-based groups of people living with HIV (PLHIV). NAPWHA's membership of national networks and state-based organisations reflects the diverse make-up of the HIV-positive community and enables NAPWHA to confidently represent the positive voice in Australia.

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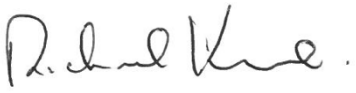

living positive victoria

napwha national association of people with HIV australia

CANNABIS USE AMONG PEOPLE WITH HIV IN AUSTRALIA

People with HIV (PLHIV) have used cannabis for a range of reasons – both medicinal and recreational – since the beginning of the HIV epidemic. [1] PLHIV consistently report levels of recreational use that are similar or more than the general population. For example, gay and bisexual men with HIV have a higher prevalence of cannabis use compared with their HIV-negative peers.[2]

Even though self-reported cannabis use has been described in terms of "non-medical use" in HIV Futures, and simply "drug use" in the Gay Community Periodic Surveys, we observe that among our communities, many people use cannabis for its actual or perceived health benefits. While we have very few data on the reasons PLHIV use cannabis, in one study of 1,629 Australians who use cannabis for medicinal purposes, 1.6%. (n=26) reported HIV/AIDS as one of the reasons for use, and 0.7% (n=12) people reported HIV/AIDS as their main health condition relating to the use of cannabis medicinally.

Medicinal cannabis access schemes at state and Commonwealth levels of government are complex to navigate. Many of the reasons that PLHIV may use cannabis medicinally has a paucity of evidence supporting the use for those medical conditions. Healthcare professionals have little confidence around the medicinal use of cannabis for PLHIV. Also, medicinal cannabis is unaffordable for an entire group of PLHIV who currently use cannabis.
Because of these barriers to legal medicinal cannabis, the vast majority of PLHIV in Australia who use cannabis, get access via the black-market. This places PLHIV in a difficult position with respect to the law. The safest way to access and consume cannabis would be for the Victorian State Government to establish a legal market for cannabis.

In this submission, we will provide an overview of the data we have on PLHIV who use cannabis in Australia, from HIV Futures (Australian Research Centre in Sex Health and Society, Latrobe University) and contextualise this data with our knowledge of the lived experiences of PLHIV and a series of recommendations to reduce harms associated with cannabis use.

[1] Melissa E Badowski and Sarah E Perez, 'Clinical Utility of Dronabinol in the Treatment of Weight Loss Associated with HIV and AIDS' (2016) 8 *HIV/AIDS (Auckland, N.Z.)* 37, 37.
[2] Timothy Broady et al, *Gay Community Periodic Survey: Melbourne 2018* (Report, Centre for Social Research in Health, UNSW, 2018) 23–4.

RECOMMENDATIONS

1. Victoria establishes a regulated legal market for cannabis.
    a. Restrict sale to adults.
    b. Regulation of quality and potency.
    c. Establishing an impairment test for road safety.
2. Victoria decriminalises the personal cultivation of cannabis (up to a certain limit) and allows people to grow for others (up to a certain limit).
3. Expungement of previous cannabis convictions.
    a. People who have historical convictions relating to cannabis possession and set thresholds of supply and cultivation, should have their convictions expunged. Drug related convictions can have a long-term negative impact on the employability of an individual. People who have skills in the cultivation of cannabis should not be excluded from participating in the legal market. Examples from overseas have shown when a legal scheme does not include expungement, the exclusion of people with previous cannabis convictions undermines a legal market (that is, the continuation of a black-market for cannabis).
4. A revenue mechanism for the state to cover the cost of negative externalities, such as health and mental health services, harm reduction, primary prevention, education and health promotion.
    a. Although some negative externalities are associated with cannabis, these harms have a significantly less impact on individuals and society compared with other legal drugs such as alcohol and tobacco. The harms associated with legal drugs can be met through a revenue mechanism, although we recognise that the Commonwealth have exclusive powers over taxation of goods and services.
5. Further research into the reasons why people with HIV use cannabis in Australia.

MEDICINAL CANNABIS ACCESS PATHWAYS

Accessing medicinal cannabis through the established regulatory pathways is complex. The pathways to access vary between states and territories. For some medicinal cannabis products, additional approval needs to be given by the Therapeutic Goods Administration.

Currently, medicinal cannabis products are expensive to obtain, as they are not subsidised through the Pharmaceutical Benefits Scheme (PBS) and further complicated by the Commonwealth requiring pharmaceutical quality to medicinal cannabis products.

The complexity and price associated with accessing medicinal cannabis products will be limiting for most PLHIV.

Data from the most recent National Drug Strategy Household Survey 2019 shows that 96% of people who reported using cannabis for medicinal purposes, did not obtain their cannabis by prescription.[3]

Medical conditions and evidence

The National Drug and Alcohol Research Centre (NDARC) undertook a large review of available evidence into conditions that medicinal cannabis may benefit. Some of these conditions are experienced by PLHIV. The review did not investigate all conditions that PLHIV may find medicinal cannabis useful for.

The level of evidence for conditions was poor.[4] This is due to both the legal status of cannabis impeding research and limitations in study design. Some of the challenges for study design include, retention of patients particularly in control groups without psychoactive placebo[5] and how efficacy is measured (using an absolute reduction in pain scores and an absence of quality of life or tolerability of pain and side effects measures).

Due to the lack of evidence and level of confidence in the evidence, many clinicians will be hesitant in prescribing medicinal cannabis products for PLHIV.

Limited opportunity for the Victorian Government to reform medicinal cannabis scheme

The nature of the medicinal cannabis scheme involving both Commonwealth and state levels of government, means that the opportunities for reform are very few. There is very little the Victorian State Government can do to influence reform at a Commonwealth level. Therefore, access to medicinal cannabis for PLHIV will continue to be limited and barriers will remain unaddressed.

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[3] Australian Institute of Health and Welfare, *Emerging Topic: Medicinal Cannabis* (Report, AIHW, 2020) 3; Australian Institute of Health and Welfare, *National Drug Strategy Household Survey 2019* (Report No 32, AIHW, 2020).

[4] Therapeutic Good Administration, *Guidance for the Use of Medicinal Cannabis in Australia: Overview* (Report No 1, Commonwealth Department of Health, December 2017).

[5] National Academies of Sciences, Engineering, and Medicine, 'Challenges and Barriers in Conducting Cannabis Research' in *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research.* (National Academies Press (US), 2017) 377.

CANNABIS USE AMONG *HIV FUTURES* PARTICIPANTS

HIV Futures is a study of quality of life among people living with HIV (PLHIV) in Australia that forms part of a series of studies that have been running since 1997. In each iteration of the HIV Futures study, a cross sectional survey of the Australian population of PLHIV is conducted.

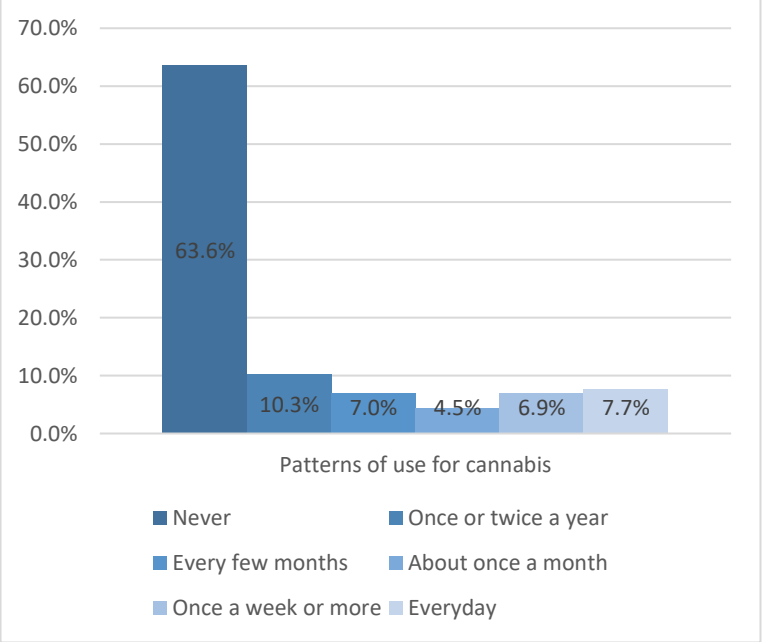
Data and analysis on the PLHIV who reported regular cannabis use from HIV Futures 9 and HIV Futures 8 was provided to us by Dr Jennifer Power at the Australian Research Centre in Sex, Health and Society, La Trobe University.[6]

In HIV Futures 8, 10.6% (n=90) of respondents reported regular use of cannabis. Regular use and occasional use were not defined in the survey and so participants determined what characterised these patterns of use.

For HIV Futures 9, the questions relating to patterns of use of drugs were further broken down to more meaningfully understand patterns of use among PLHIV.

In HIV Futures 9, 14.6% (n=98) of respondents reported regular use of cannabis. For this analysis, regular use was defined as weekly or more often. 7.7% (n=52) reported daily use, which may indicate a small proportion of PLHIV experience dependent patterns of use.

Figure 1: Patterns of use for cannabis in HIV Futures 9, percentage (n=671)



[6] Jennifer Power et al, *HIV Futures 9: Quality of Life Among People Living with HIV in Australia* (Monograph No 116, Australian Research Centre in Sex, Health and Society, La Trobe University, 2019); Jennifer Power, Graham Brown and Anthony Lyons, *HIV Futures 8: Health and Wellbeing of People Living with HIV* (Broadsheet, Australian Research Centre in Sex, Health and Society, La Trobe University, 2016).

Figure 2: Patterns of use for cannabis in HIV Futures 8, percentage (n=849)

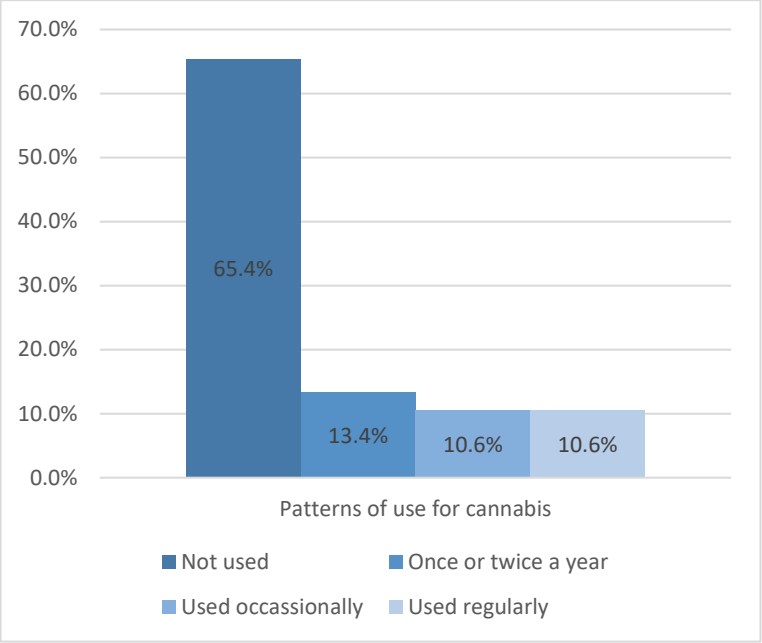
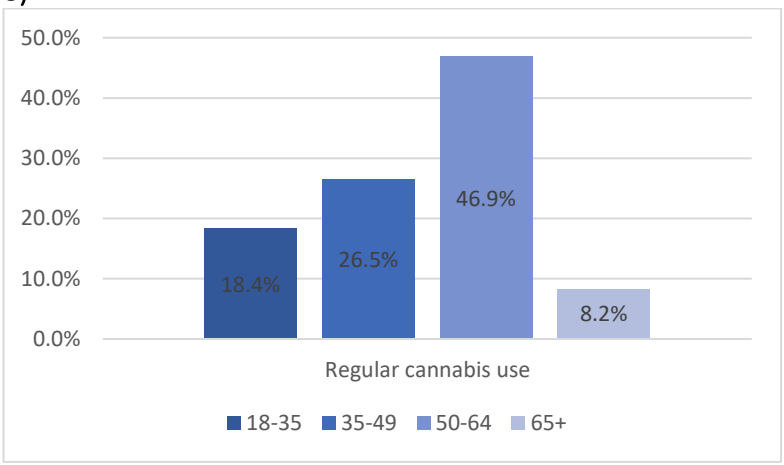


Figure 3: Age distribution of PLHIV who reported regular cannabis use in HIV Futures 9, percentage (n=98)



Of the respondents that reported regular cannabis use in HIV Futures 9, nearly half were aged 50 to 64 years old, although a Pearson's Chi-squared test showed there were no significant differences in age groups.

When comparing PLHIV who reported regular cannabis use to those who reported less than weekly cannabis use or no cannabis use in HIV Futures 9:

- Were significantly more likely to have TAFE/trade diploma and less likely to have a university degree (p<.001).
- Were significantly more likely to be in the lowest income bracket of less than $30,000 per annum (p=0.017) and report financial stress (p=.001) but there were no significant differences based on employment status.
- There were no significant differences based on gender, sexuality, place of residence, living alone, or living with someone other a pet.

- There were no significant differences in PozQoL[7] scores. PozQoL is a validated quality of life measure for people living with HIV and comprises a 13-item questionnaire across health, psychological, social and functional domains.
- There were no significant differences in the proportion of PLHIV who reported a current diagnosis of depression (p=0.154) and anxiety (p=0.213). When we further analysed PLHIV who reported daily use to those who reported less than daily or no use, there was a significant difference in mean scores in emotional wellbeing (SF36) (p=0.027).

HIV Futures 8 tells us a slightly different story. Those who reported regular cannabis use compared with less than regular or no use:

- Had a lower mean age (48.46 years old compared with 50.98 years old, t-test p=0.068).
- Had poorer social support. (t-test p=0.036)
- Had poorer emotional wellbeing (SF36, t-test p<.0001)
- Had poorer scores on role limitation (the impact of physical or mental health on completing everyday tasks) (t-test p=0.009)
- Had lower reported resilience (t-test p=0.051)
- Had a greater use of alcohol (t-test p=0.010)
- Were more likely to report income of less than $30,000 per annum ($X^2$=9.74 with 4 df, p=0.045) and
- Were more likely to live in the city (X^2=14.36 with 2 df, p=0.001).

There are a few reasons why the difference may be less obvious in HIV Futures 9. Firstly, we had a number of scales in HIV Futures 8 that we did not use in HIV Futures 9. It is likely these are more sensitive and pick up smaller differences than the categorical data we are looking at with HIV Futures 9. This was an outcome of needing to shorten the questionnaire unfortunately – we couldn't include as many scales. Also, the way the question about marijuana/cannabis was asked differed in each survey so this may explain some of the difference.

NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY 2019 – PEOPLE WHO REPORTED MEDICINAL USE OF CANNABIS

The most recent National Drug Strategy Household Survey 2019 asked respondents about their use of cannabis for medicinal purposes for the first time. While not directly comparable to HIV Futures 8 and 9 data, the characteristics of people who only used cannabis medicinally in NDSHS 2019 were similar to those reported in HIV Futures. For example, people who reported only medicinal use of cannabis were 2.4 times more likely to report a mental health condition, 2.8 times more likely to report high levels of psychological distress and 3.2 times as likely to report poor or fair health when compared with people who use cannabis only for non-medical purposes.[8]

[7] Graham Brown et al, *PozQoL: Valuing Quality of Life Among People with HIV* (Broadsheet No 2, Australian Research Centre in Sex, Health and Society, La Trobe University, 2017).
[8] Australian Institute of Health and Welfare, 'Emerging Topic: Medicinal Cannabis' (n 3) 4; Australian Institute of Health and Welfare, 'National Drug Strategy Household Survey 2019' (n 3).

COMMENTARY

- This predominately older cohort of PLHIV are likely to have been living with HIV for longer and may have been using cannabis since around the time of their diagnosis.
- For some of this cohort, treatments for HIV were either not available initially or had significant side effects. Cannabis may have been used to increase our appetite or reduce nausea associated with some treatments.
- Many people who had developed AIDS-defining conditions used cannabis to manage the side-effects of these conditions and to assist in palliative and end of life care.
- Many people who are living with HIV long term and some who were diagnosed late have survived AIDS-defining conditions and live with the long-term effects of those conditions on their health.
- Early treatments and living longer with HIV have had a life-long impact physically[9] and neurologically,[10] with some PLHIV experiencing chronic peripheral neuropathic pain,[11] HIV-associated inflammation[12] and HIV-associated neurocognitive disorder (HAND).[13] Some PLHIV have found that the use of cannabis, while not necessarily relieving the side effects of the comorbid conditions, either enables them to tolerate the pain (due to the psychoactive effects of THC), is a more tolerated side-effect compared to other medications (for example, opioids) or enables an individual an improved quality of life.[14] Cannabis may even have a positive effect on brain inflammation among PLHIV.[15]
- The direction of the relationship between daily cannabis use and poor emotional wellbeing is not understood and it is possible that some PLHIV may be using cannabis to help cope with their poor emotional wellbeing, rather than having poor emotional wellbeing as a result of daily cannabis use. It is also possible that for some PLHIV the relationship is bidirectional.

CONCLUSION

People living with HIV use cannabis for a range of reasons both medically and recreationally. For a vast majority of PLHIV accessing cannabis for medicinal reasons, they continue to access cannabis through the black market because they perceive there is medical benefit. So

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[9] EA Wulff, AK Wang and D Simpson, 'HIV-Associated Peripheral Neuropathy: Epidemiology, Pathophysiology and Treatment' (2000) 59 *Drugs* 1251.
[10] Steven G Deeks, Russell Tracy and Daniel C Douek, 'Systemic Effects of Inflammation on Health during Chronic HIV Infection' (2013) 39(4) *Immunity* 633; Sonia Zicari et al, 'Immune Activation, Inflammation, and Non-AIDS Co-Morbidities in HIV-Infected Patients under Long-Term ART' (2019) 11(3) *Viruses*.
[11] Scott R Evans et al, 'Peripheral Neuropathy in HIV: Prevalence and Risk Factors' (2011) 25(7) *AIDS*.
[12] Deeks, Tracy and Douek (n 10).
[13] David B Clifford and Beau M Ances, 'HIV-Associated Neurocognitive Disorder (HAND)' (2013) 13(11) *The Lancet infectious diseases* 976.
[14] Ronald J Ellis et al, 'Smoked Medicinal Cannabis for Neuropathic Pain in HIV: A Randomized, Crossover Clinical Trial' (2009) 34(3) *Neuropsychopharmacology: official publication of the American College of Neuropsychopharmacology* 672.
[15] Caitlin Wei-Ming Watson et al, 'Cannabis Exposure Is Associated With a Lower Likelihood of Neurocognitive Impairment in People Living With HIV' (2020) 83(1) *JAIDS Journal of Acquired Immune Deficiency Syndromes*; Ronald J Ellis et al, 'Beneficial Effects of Cannabis on Blood-Brain Barrier and Inflammation in HIV' in *Neuroimaging and Associated Biomarkers* (2019).

long as the quality of evidence for medicinal cannabis for some health conditions remains low, doctors and specialists will be reluctant to prescribe cannabis through the established legal pathways. In addition, for some PLHIV, the legal pathways to access medicinal cannabis are cost prohibitive.

In order to reduce harms associated with cannabis use (health, mental health, social and legal), the Victorian government could consider establishing a legal cannabis market for adult consumption. In doing so, a revenue mechanism could ensure that negative externalities associated with cannabis use are mitigated. Through the establishment of a legal framework, people who experience dependent or harmful patterns of use would be more likely to access health care when they need it.

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