ADAI, a multidisciplinary research center in the University of Washington Department of Psychiatry and Behavioral Sciences, has been the recipient of the Washington State Dedicated Marijuana Fund for research at the University of Washington (Dedicated Marijuana Fund) since July 2015.

INTRODUCTION

Cannabis Research & Education in Pandemic Times

Studies have found that substance use increases during times of economic stress, disproportionally affecting racial and ethnic minorities and individuals experiencing mental health challenges. In this unprecedented time of both a deep economic crisis and a pandemic, such an increase further amplifies the COVID-related inequities experienced by marginalized groups, as they face disproportionately higher infection rates and mortality from the virus.

In our state, cannabis sales have been soaring, with a 41% increase in excise tax collection between August 2019 and August 2020. This increase alone is a concern, but combined with the fact that a higher proportion of the products in the WA market are high THC potency manufactured cannabis products (currently 35% of sales, up from 9% in 2014), it becomes even more worrisome. Also of concern is evidence from Canada and the Netherlands that suggests this increase in cannabis sales during COVID does not represent more consumers, but rather higher levels of consumption among current cannabis consumers.

This new reality has all the ingredients of a perfect public health storm: an increasingly potent substance being used in higher doses and more frequently by a segment of the population where people with behavioral health challenges and those experiencing social inequalities are overrepresented.

As the University of Washington recipient of the Washington State Dedicated Marijuana Fund for research, ADAI has taken seriously the mandate to study the "short and long-term effects of marijuana use and related consequences" as framed by I-502 and other legislative language. More than ever, the work that we do at the UW is essential for honoring our state’s commitment to equity and social justice.

This report presents ADAI activities and projects with support from the Dedicated Marijuana Fund during the 2019-2021 biennium. It also documents ADAI’s ability to successfully adjust to the challenges of conducting research in a time that imposes so many limitations.

Susan Ferguson, ADAI Director
Bia Carlini, ADAI Cannabis Research and Education
ADAI Research Projects

Every biennium, ADAI Cannabis Workgroup scientists carry out short-term research projects that can assist Washington community-based agencies and policymakers in making decisions and setting priorities.

We share our research findings with stakeholders as they become available and regularly participate in state-based workgroups, presenting at state, county, and community-based agencies webinars/meetings. We also disseminate results from these projects through academic peer-reviewed publications, online factsheets and research briefs, and other educational materials via our dedicated website and other channels (see section on Dissemination & Outreach).

Projects

The following projects were concluded in the 2019-21 biennium:

“*We Don’t Speak English at Home*”: Immigration, Acculturation, and Cannabis Use Among WA State Youth
Bia Carlini, PhD, MPH, Jason Williams, PhD, Robin Harwick, PhD, MS

*Cannabis Industry Marketing Violations in WA: An Analysis of Public Records*
Bia Carlini, PhD, MPH, Sharon Garrett, MPH, MA, Caislin Firth, PhD, MPH, Ilana Pinsky, PhD

“I Don’t Do Drugs, Just Weed”- Cannabis-only vs. Cannabis and Other Drugs Use – An Analysis of a National Survey Data
Bia Carlini, PhD, MPH, Gillian Schauer, PhD, MPH

*Food Hardship as a Strong Predictor of Tobacco and Cannabis Use Among Youth in WA State*
Robin Harwick, PhD, MS, Bia Carlini, PhD, MPH, Jason Williams, PhD

Find detailed descriptions of these ADAI projects here.

Consumer Assessment of Receptivity to Point-of-Sale Education and Safe Storage Intervention

Funded by Public Health Seattle King County and the Spokane Regional Health District, this project collected information to inform a pilot prevention intervention promoting free safe storage devices and youth prevention messaging in cannabis stores for parents and guardians who use cannabis. CERP conducted interviews and focus groups with adults who use cannabis and have children under 18 years old in their home. Participants were asked about their current storage practices and beliefs, interest in receiving a free storage device, intentions to use such a device, and device features that would be most helpful or desirable. In addition, they were asked to react to messages that promoted secure storage of cannabis with the intent to keep it away from youth and to reduce youth cannabis exposure.

Learn more about this work on safe storage here.
Publications

The process of getting a publication released in a peer-reviewed scientific journal can take as long as a year or more. ADAI has traditionally shared findings with the Washington community while papers are under submission to expedite the dissemination of work that can be used to support decision-making. The list below reflects the work of the ADAI Cannabis Workgroup alone or with collaboration/funding from other agencies and organizations. In most cases, the actual research work happened in previous biennia.


Featuring New ADAI Research Scientists

In this biennium, ADAI was able to add two part-time cannabis scientists to collaborate on selected intramural projects, Dr. Gillian Schauer and Dr. Caislin Firth. A list of their publications in collaboration with other organizations during this biennium can be found here.

Research Projects Across UW

ADAI periodically releases Requests for Proposals (RFPs) to University of Washington scientists and funds marijuana research across multiple disciplines on the "short and long-term effects of marijuana use and related consequences.” ADAI’s RFPs are framed by I-502 and other legislative language and include the impact of marijuana use and legalization on public health in Washington State, community norms, and individual and group behaviors. Completion of the following projects is scheduled for June 2021.

Projects funded this biennium are:

Do Current Parenting Interventions Work for Parents Who Use Marijuana? Effective Strategies for Preventing Underage Marijuana Use among their Adolescent Children
Marina Epstein, PhD, Social Development Research Group, School of Social Work
High-potency manufactured cannabis concentrates, such as oils and butters, contain THC levels varying from 60-90%. These levels are a 6-to-9-fold increase over what was considered “high-potency” back when the main method of use was smoking the cannabis plant.

What are the likely health risks of highly concentrated products? Is high potency cannabis more detrimental to health than low potency cannabis? Which populations are most likely to be affected by high potency cannabis use?

To address these questions, the Prevention Research Subcommittee, an advisory group to the Washington Division of Behavioral Health and Recovery, invited a group of researchers to collect the scientific evidence on the health and behavioral risks associated with high-potency cannabis use in March of 2020. Under the leadership of ADAI’s Dr. Carlini, experts from the University of Washington and Washington State University came together to summarize the evidence to date and develop a consensus statement with the aim to inform policy and practice.

According to the workgroup’s statement, research available to date shows that as THC content of cannabis products increases, so too does the risk of adverse health effects. This increased risk from the use of higher potency cannabis products is particularly concerning for young users and those with certain pre-existing mental health conditions. These harms are also likely to disproportionately affect marginalized populations (low income, minorities, e.g.) who choose high-potency products because of their lower costs, ease and discrete nature of use, glamorization of its use through social media and advertising, and perception of safety.

Members of the workgroup and results of this collaboration (the full report, a research brief, consensus statement, and public presentation slides) can be found on the ADAI website along with additional resources and summaries related to cannabis potency at: https://adai.uw.edu/research/cannabis-research-education/high-potency-cannabis.
New look! ADAI’s Learn About Marijuana website

LearnAboutMarijuanaWA.org

ADAI’s Learn About Marijuana website has been newly redone with updated information and a fresh look! This site is widely viewed as an authoritative source for information about marijuana, with more than 700 organizations in Washington and other states linking to it and approximately 300,000 pages viewed between July 1, 2019 and December 31, 2020.

Launched in 2012, the Learn About Marijuana website is supported by I-502 Marijuana Funds distributed to ADAI. The website features research briefs and factsheets on dozens of marijuana topics, including information on products and modes of administration, health effects, other drugs and cannabis, and legal and safety issues. Special resource pages are also available for parents, teens, adult consumers, Spanish-speakers, and people seeking help for problem use. The site also features e-learning modules, frequently asked questions, and options for accessing treatment or support.

Updated! Online Medicinal Cannabis and Chronic Pain provider training

adai.uw.edu/mcap

In 2017, the National Academy of Sciences concluded that there was “conclusive and substantial evidence that cannabis and cannabinoids have a moderate effect as a therapeutic agent in the treatment of chronic pain among adults.”9 While a moderate effect doesn’t seem like much, when it comes to chronic pain this is great news, especially considering 2016 CDC findings that opioid medications show no evidence of efficacy for many of the same conditions.10

Keeping in mind the continuing need to educate Washington clinicians on this topic, ADAI launched an updated 2020 version of our 2014 online training for healthcare professionals on medicinal cannabis and chronic pain. This 2-module online training presents current science, clinical practice guidelines, and Washington State DOH Medical Marijuana Authorization Guidelines. Updates were made with support of I-502 funds and include new information about Vape-associated Lung Injury (EVALI), CBD products available in drugstores and online, the latest scientific evidence, and new features allowing for easier navigation and improved accessibility.

The training is free. For those interested in Continuing Medical Education credits (up to 2 AMA PRA Category 1 Credits™), they are available at low cost for clinicians through the University of Washington School of Medicine until August 2022.
DISSEMINATION & OUTREACH

ADAI understands that new knowledge can only impact practice if it is disseminated widely and in a timely manner. The events below are a selected list of ADAI Cannabis Research and Education staff participation in county, state, multi-state, and national events.

In Washington State

**WA State House Commerce and Gaming Commission**

Presenter (Dr. Ferguson, Dr. Carlini): *Cannabis-Related Research at the University of Washington*, September 15, 2020.

**Washington State Liquor and Cannabis Board**


Member (Dr. Carlini): Taxing Cannabis by Potency Workgroup, WSLCB Legislative Direct Work and Report, September-December 2020.


**Washington Healthy Youth Coalition (WHY)**


**County Agencies**


Member (Ms. Garrett): King County Youth Marijuana Prevention and Education Program (KC-YMPEP) Advisory Committee, July 2019-June, 2020.

**Community-based Organization Presentations**


Outside Washington State

Multi-State Agencies

Presenter (Dr. Carlini and Dr. McDonnel, WSU): NW Prevention Technology Transfer Center and NW Mental Health Technology Transfer Center. The More the Merrier? December 17, 2020.

National


International

ADAI hosted the Embassy of the Kingdom of The Netherlands representatives lead by Mr. Peter Slort, Counselor for Justice and Security of the embassy. The goal of their visit was to learn about Cannabis Legalization in the State of Washington. July 23, 2019.


REFERENCES

5. WA House of Representatives Commerce & Gaming Committee Work Session. Updates from WS Liquor and Cannabis Board. November 30th 2020, Olympia WA.

Revised August 2023