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Dear members of the Psychopharmacology Section,

It is my pleasure to present our Fall/Winter 2023 newsletter! It is also my pleasure to introduce my new co-editor, Dr. Jérémie Richard, a postdoctoral fellow at the John Hopkins School of Medicine’s Center for Psychedelic and Consciousness Research. I look forward to collaborating on many future issues.

In this issue, Dr. Robert K. Ax, makes a case for the creation of a home-grown Master of Science in Clinical Psychopharmacology (MSCP) program to support the RxP movement here in Canada. Dr. Jérémie Richard provides an introduction to an ongoing series where he will share findings as well as reflect on his time conducting research into the use of psychedelic compounds in the treatment of mental health issues at John Hopkins School of Medicine. Next, Dr. Bryan W. Jenkins, also a researcher at the John Hopkins School of Medicine, takes a deep dive into the consequences of cannabis legalization in Canada. Last, but certainly not least, Dr. Pat DeLeon (former APA President) provides comment on Colorado’s recent scope of practice expansion to allow psychologists to prescribe mental health medications and provides an update on the RxP bill in Pennsylvania. Dr. DeLeon also comments on additional professional issues in the United States.

Enjoy!

A CALL FOR CONTRIBUTIONS

We are always looking for contributions to the newsletter and welcome any ideas you may have. Here are some examples of what you might submit:

- Brief articles on psychopharmacology-related topics
- Short summaries of recently published research related to psychopharmacology
- Reviews of recently released books related to psychopharmacology
- Experiences of psychologists who have completed a post-doctoral M.Sc. in Clinical Psychopharmacology
- Advertisements for jobs—or anything else that might be of interest to section members!

Submissions will be reviewed by Bryan Butler and can be sent to: bryan.butler@mail.mcgill.ca

Previous newsletters can be accessed here: https://cpa.ca/sections/psychopharmacology/newsletters/

I hope that you are all keeping well.

Kind regards,

Bryan
Before there was prescriptive authority, there was prescriptive authority training.

When it comes to the prescriptive authority (RxP) initiative, training and regulatory success are synergistic. One supports the other: more RxP program graduates means more psychologists with a personal investment in RxP authorization, and as the scope of practice is expanded across states, provinces and territories, interest in training grows.

Years before the first psychologists were authorized to prescribe medications in the U.S. military, there was an RxP training program offered by the Prescribing Psychologists’ Register (PPR), a private company. PPR granted a certificate rather than a degree and the program has since closed, but it was a start. The Department of Defense Psychopharmacology Demonstration Project began soon afterwards, followed by the first degree-granting programs.

The Master of Science in Clinical Psychopharmacology (MSCP) is now the gold standard for RxP training in the United States. There are presently six such university-based programs that hold American Psychological Association (APA) “designated” status (APA, 2023).

Is it time for Canada to have its own MSCP program? I think so.

Building a Canadian RxP Program

Why

In establishing an MSCP program, Canadian RxP advocates are going past the talking stage and making a commitment. It tells others within and beyond the profession: We’re serious about this, and we’re in it for the long haul.

A program housed in a Canadian school can shape a curriculum that is more consistent with provincial and territorial healthcare practice regulations, better attuned to cultural and political issues, and more relevant to the healthcare needs of particular patient populations in the locality where it’s based. It will be easier to get input from patient populations and their advocates and to enlist them as stakeholders in the program’s success. The faculty can better assist students with arranging for the supervised clinical experience (formerly the “practicum”) that forms part of the model curriculum. Prospective students can be more assured that the curriculum will be designed and taught with attention to scope of practice requirements across the nation as they are developed and implemented.
The cost to students will likely be lower. According to Masterstudies (2023), master’s degrees in Canada cost an average of $21,100 per year for international graduate students, but average $62,650 for international graduate students in the United States. It may be much less expensive, even online, to pursue an MSCP based in Canada.

Politically, the optics in a particular territory or province might be more favorable for RxP authorization if the program is based there. A school with a solid reputation communicates quality assurance with regard to a proposed training program, inspiring more confidence in politicians and health regulatory college members, and inclining them toward supporting an expanded scope of practice. Program administrators, professors and students are constituents, too, and dialogue and advocacy at a more personal level with politicians and regulators can be crucial to success.

Program graduates will have a personal investment in promoting provincial and territorial RxP authorization initiatives.

And because a Canadian MSCP program is yours, and pride of ownership matters.

What

Should the program be housed in a new or existing school? Online, in-person or a hybrid model? Predoctoral option (joint PhD/PsyD-MSCP) or postdoctoral degree only? What language? PhD or PsyD? Supervised clinical experience requirement? Integrate with an undergraduate curriculum, i.e., a “pre-psychology” major?

Discussing these and other important questions is an excellent start to creating a program.

How

Start with a review of these APA guidelines on RxP training and go from there, adapting them as appropriate in response to initial feedback from your stakeholders, and to regulations, resources and patient care needs:


When and Where

It’s never too soon to start planning. A nucleus of energetic supporters can create proposals and investigate potential sites. Would an existing CPA-accredited program be a possibility or might a brand-new professional school be the right approach?

Who

And who should build this program?

Maybe you.

The planning has to start somewhere. Are you a leader, a visionary, a healthcare advocate, an entrepreneur, a system challenger, an educator, an organizer or an administrator? Are you energetic, audacious, ambitious? Then go for it!

It’s Time to Take the Leap

In assessing the future of psychology training in Canada, Nicholson (2022) wrote, “As a profession, we also need to be cognizant that, if we do not move toward change, change can be forced upon us (p. 270)...[O]ur training programs must make dramatic changes. Small incremental changes, such as adding a course here or including some readings on a topic there, are insufficient to make the changes that our future needs (p. 274)."

An RxP training option (not a requirement) would be a significant, highly desirable, and perhaps “dramatic” change, but it certainly wouldn’t be premature. It has been nearly forty years since the first state authorization bill was submitted (Hawaii, in 1984), and psychologists have been prescribing in the United States for almost thirty years. Data show that psychologists see RxP as reasonable and desirable. In a recent survey of CPA members (students and psychologists), 74% of respondents agreed that “RxP is a logical extension of current practice,” and 65% agreed with the statement “If psychologists in Canada obtain RxP, I will enroll in RxP training” (Sepehry, 2023).

In addition to the MSCP programs already operating in the United States, several more are currently in the planning stages. Join us.

It’s your time!

Robert K. Ax, Ph.D., is the 2023 recipient of the APA Division 55 (Society for Prescribing Psychology) Distinguished Contribution to the Advancement of Pharmacotherapy at the National Level Award.
References


To New Beginnings

As co-editor of the *Psynapse* newsletter for the Canadian Psychological Association’s Psychopharmacology Section, I was inclined to contribute to this publication in a way that is both personally meaningful and professionally relevant. Through discussions with my co-editor Bryan Butler and other members of the Psychopharmacology Section Executive Committee, I decided that I would write a series of four contributions to the *Psynapse* newsletter detailing my experiences in clinical research as a psychologist working in the field of psychedelic science, aiming to integrate in a synergistic manner both psychotherapeutic and psychopharmacological interventions. Specifically, my research aims to develop and evaluate effective treatments for a diverse range of mental disorders aptly characterized by Professor Robin Carhart-Harris in the entropic brain hypothesis as disorders entrenched in excessively rigid, fixed, and ordered patterns such as depression, addiction, and other disorders of obsessionality (Carhart-Harris, 2018; Carhart-Harris et al., 2014). In addition to writing about my personal experiences working in this domain of inquiry, I wanted to provide a summary of what I consider to be the three most significant publications in psychedelic research over the past six months. For this first part, I will be placing special emphasis on recent publications from the research center I am now a part of at the Johns Hopkins School of Medicine.

In September 2023, I began my position as a Postdoctoral Research Fellow at the Johns Hopkins Center for Psychedelic & Consciousness Research (CPCR). Having completed my PhD in Counselling Psychology at McGill University in August of the same year, working as part of this team of researchers meant that I would have the opportunity to have hands-on experience in clinical trials that involve the use of psychedelic compounds as “novel” transdiagnostic psychopharmacological approaches to the treatment of mental disorders. I place the word *novel* in quotes as much of the research into psychedelics began over seventy years ago, with hundreds of research articles being published in the 1950s and 1960s describing the use of psychedelics in clinical contexts up until the United States Controlled Substances Act of 1970 put a temporary halt on all ongoing clinical research on psychedelic substances including lysergic acid diethylamide (LSD), N,N-Dimethyltryptamine (DMT), 5-methoxy-N,N-dimethyltryptamine (5-MeO-DMT), and psilocybin (magic) mushrooms.

My move from Montreal to Baltimore was set in motion when I received news that I was selected as one of the recipients of the Banting Postdoctoral Fellowship under the Canadian Institutes of Health Research (CIHR). Throughout my undergraduate and graduate studies, I had an ardent interest in psychedelic research (that I mostly kept to myself) stimulated by landmark publications including:
Psilocybin Can Occasion Mystical-Type Experiences Having Substantial and Sustained Personal Meaning and Spiritual Significance (Griffiths et al., 2006),
Mystical-Type Experiences Occasioned by Psilocybin Mediate the Attribution of Personal Meaning and Spiritual Significance 14 Months Later (Griffiths et al., 2008),
Pilot Study of the 5-HT2AR Agonist Psilocybin in the Treatment of Tobacco Addiction (Johnson et al., 2014), and
Psilocybin Produces Substantial and Sustained Decreases in Depression and Anxiety in Patients with Life-Threatening Cancer: A Randomized Double-Blind Trial (Griffiths et al., 2016).

However, I never considered it feasible to be involved in such research due to the paucity of universities or university-affiliated research hospitals conducting this type of research in Canada. Moreover, I quickly came to realize that at the time, much of the research into the clinical use of psychedelics was coming from a single research center at Johns Hopkins and saw it as an unlikely possibility that I would end up joining their team. Through a series of fortunate events initiated in May 2022, what began as a fanciful hope began to materialize into a potential reality as I began working on my postdoctoral research proposal with Dr. Albert Garcia-Romeu, now an Associate Professor within the Johns Hopkins School of Medicine.

Fast-forward to the present day, November 2023. I have now completed my initial orientation and have Institutional Review Board (IRB) approval to be involved in three ongoing clinical trials within the CPCR: a pilot study in the use of psilocybin to address depression in people with Mild Cognitive Impairment (MCI) or early Alzheimer’s Disease (AD); a pilot study in the use of psilocybin to address pain, fatigue and cognitive symptoms in people with Post-Treatment Lyme Disease (PTLD); and a multi-site double-blind randomized-controlled trial in the use of psilocybin for tobacco use disorder/smoking cessation. I am actively beginning my first involvements as a session facilitator, accompanying participants as they go through these clinical trials involving several preparatory sessions, multiple ascending dosing sessions of psilocybin, followed by integration sessions and post-treatment follow-up. In upcoming Psynapse newsletters, I aim to provide additional details of my involvement in clinical trial research in addition to detailing my own postdoctoral research program and broader contributions to the field of psychedelic research.

In short, my principal postdoctoral research program aims to investigate the effect of psilocybin-assisted psychotherapy for the treatment of addictive disorders including tobacco use disorder, cannabis use disorder, and gambling disorder. With some preliminary clinical research into psychedelic-assisted therapy and naturalistic data available on tobacco use disorder (Garcia-Romeu et al., 2014; Johnson et al., 2014; 2017a; 2017b) and naturalistic data being available for cannabis use disorder (Garcia-Romeu et al., 2020), my novel contribution in this area of research will be in the domain of behavioral addictions. Beginning with gambling disorder (GD), I aim to develop a conceptual model and clinical rationale of psilocybin-assisted psychotherapy for GD through the synthesis of available theoretical frameworks and empirical data; will be collecting naturalistic data on psychedelic use to address problems with gambling; and will be developing a protocol for a pilot study to investigate the tolerability, feasibility, and effectiveness of psilocybin in reducing disordered gambling symptomatology. The aim of this research is not only to investigate whether psilocybin-assisted psychotherapy can lead to decreases in gambling behaviors, but also how this intervention could lead to reductions in GD symptoms including preoccupation with gambling, repeated unsuccessful attempts to control or stop gambling, and gambling as a way of escaping from problems or relieving dysphoric mood (American Psychiatric Association, 2013). I am excited to share with the readers of this newsletter the findings that will emerge out of my work over the next couple years.
Psychedelic Research: From Naturalistic to Clinical Data

As I alluded to in the previous section, there are different levels of research into psychedelics that mirror what is seen in other domains of psychopharmacology. This includes preclinical research (e.g., in vitro, animal studies), naturalistic observational research (e.g., survey-based research into individuals using substances outside of the context of clinical trials) and clinical research (e.g., pilot or feasibility studies and clinical trials). All these levels of research work in parallel to advance the field in identifying mechanisms of action of psychedelics at interacting levels from molecular biology upwards to human phenomenology. The three articles I will be highlighting in this contribution are thematically organized around the effects of psychedelics on wellbeing and mood. These articles, published between June and September 2023, include two naturalistic studies investigating of the role of psilocybin on depressive symptoms and one double-blind randomized clinical trial in the use of a single dose of psilocybin as a treatment for major depressive disorder.

Attenuation of Psilocybin Mushroom Effects During and After SSRI/SNRI Antidepressant Use (Gukasyan et al., 2023) – Published June 8, 2023 – Journal of Psychopharmacology

What This Research Is About. The interaction of psilocybin with common antidepressants such as selective serotonin reuptake inhibitors (SSRIs) and serotonin norepinephrine reuptake inhibitors (SNRIs) is understudied. This is an especially important domain of inquiry as the current standard of clinical practice in psilocybin-assisted therapy trials for depression is to discontinue serotonergic antidepressant use for at least four to five half-lives before treatment. Although discontinuation can lead to an increased risk of depressive symptom relapse and harm for individuals, reasons for discontinuation are anchored in the findings of studies indicating that there may be reduced efficacy or an increased risk of adverse effects if psychedelics are used concurrently with an SSRIs/SNRIs. To address these gaps in the literature, this study aimed to investigate the extent to which SSRIs/SNRIs diminish the effects of psilocybin both concurrently and after discontinuation of use.

What The Researchers Did. The researchers disseminated a single survey to individuals that had used psilocybin outside of the context of clinical trials. Participants were separated based on whether they had used psilocybin while on antidepressants, or whether they had used psilocybin after discontinuing an antidepressant. Participants were asked questions about their experiences taking a moderate to large dose of psilocybin, which antidepressant they were taking/took, and were asked to provide a description of psilocybin effect in relation to their expectation for the dose. Participants were also asked for how long they had been taking antidepressants and for those that discontinued use, how long after discontinuation did they ingest psilocybin. Concurrent use of other drugs at the time of psilocybin was also assessed. Following data-cleaning procedures, 2625 participants remained, with the sample being 55% male, 91% white, 72% located in the United States and 54% completing at least a bachelor’s degree.

Primary Findings & Take-Home Message. Based on this naturalistic study, there was evidence that the effects of psilocybin were reduced when used concurrently with SSRIs/SNRIs and that these effects may last one to three months after discontinuation. Specifically, the probability of a weaker psychedelic effect was 0.55 (95% CI [0.44, 0.67]) and with SNRI, 0.47 (95% CI [0.40, 0.54]) with SSRI. It is important to note that 48.3% of participants taking an SSRI/SNRI concurrently with psilocybin did not endorse a reduced psilocybin effect and only 5.7% believed they experienced an adverse event from concurrent use. Of the subsample that reported reduced intensity of psilocybin, 51.7% reported attempting to overcome this with a higher dose of psilocybin, with 45.4% of these participants reporting they were successful in doing so.

Taken together, these results indicate that within the context of clinical studies, stratified randomization practices could be used to reduce the undo burden of antidepressant discontinuation.
Moreover, there appears to be ground for clinicians to make informed decisions on a case-by-case basis as to whether to discontinue antidepressants prior to psilocybin use, how long the tapering period should be, and whether the dose of psilocybin should be increased to offset the dampening effect of SSRIs/SNRIs.

**Naturalistic Psilocybin Use is Associated with Persisting Improvements in Mental Health and Wellbeing: Results from a Prospective, Longitudinal Survey (Nayak et al., 2023) – Published September 19, 2023 – Frontiers in Psychiatry**

**What This Research Is About.** With an increasing interest in psychedelics, research utilizing observational surveys of naturalistic (i.e., real world settings) psilocybin use has been one of the primary modalities of data collection. Despite some survey research having large sample sizes of diverse populations, one of the primary limitations in this area is that most of these surveys utilize cross-sectional designs and retrospective accounts. In this study, the researchers investigated naturalistic psilocybin use via a prospective longitudinal survey including data collection points before, immediately after, and months following psilocybin use. The researchers were interested in investigating the mental health, physical health, and wellbeing impacts of psilocybin use outside of research settings.

**What The Researchers Did.** The researchers disseminated six sequential web-based surveys that collected data from adults with an *a priori* plan to take psilocybin outside of clinical research settings. Data was collected at time of consent (T1), two weeks before (T2), the day before (T3), one to three days after (T4), two to four weeks after (T5) and two to three months (T6) after psilocybin use. Several validated questionnaires were included in the surveys and repeated across measurement periods (T2, T5, T6) including self-report measures of personality, depressed mood, state and trait anxiety, burnout, cognitive flexibility, emotion regulation, alcohol-related problems, drug-related problems, physical health, and spiritual wellbeing. Moreover, measures for the subjective qualities of psychedelic experiences were also included in the survey at T4. Overall, 2,833 participants completed the survey at T2, 1,182 completed all of the surveys up until T5, and 657 completed the final follow-up survey at T6. The researchers reported adjusted effect sizes based on standardized mean differences (SMD) with 95% confidence intervals.

**Primary Findings & Take-Home Message.** Beginning with demographic information, participants were primarily college-educated (> 50%), White (> 80%), males (> 53%), residing in the United States (> 72%) with a mean age of approximately 40 years across measurement periods. Participants primarily used dried psilocybin mushrooms (mean dose = 3.1 grams) with the reported purpose of “self-exploration”. As a whole, data collected at T2 and T6, on average, showed persisting reductions in depression (-0.58, 95% CI [-0.66, -0.50]), trait anxiety (-0.19, 95% CI [-0.26, -0.12]), personal burnout (-0.36, 95% CI [-0.42, -0.31]), work-related burnout (-0.19, 95% CI [-0.25, -0.2]) and alcohol misuse (-0.09, 95% CI [-0.13, -0.05]). There were also noted increases in cognitive flexibility (0.22, 95% CI [0.15, 0.30]), cognitive reappraisal (0.24, 95% CI [0.16, 0.32]), and spiritual wellbeing (0.38, 95% CI [0.31, 0.44]). As for personality changes, there was a noted increase in trait extraversion and a reduction in trait neuroticism after psilocybin use. Despite these generally positive outcomes, the researchers also highlight that a substantial minority of participants (11% at T5 and 7% at T6) reported persisting negative effects (i.e., depressive symptoms). At the level of subjective effects, 21.6% of participants reported meeting the criteria for a “complete mystical experience” which predicted a decrease in depressive symptoms, state anxiety, and burnout, and an increase in cognitive flexibility and spiritual wellbeing.

Taken together, these results indicate that psilocybin may have broad therapeutic potential to produce lasting improvements of mental health symptoms, with increased effect when the subjective effects of psilocybin meet the criteria for a complete mystical experience. Nevertheless, the authors caution against psilocybin use outside of clinical context due to the noteworthy number of individuals that reported harms from sessions while it remains unclear for who psilocybin use may pose unnecessary risks.
Single-Dose Psilocybin Treatment for Major Depressive Disorder: A Randomized Clinical Trial (Raison et al., 2023) – Published August 31, 2023 – JAMA

What This Research Is About. Previous research has indicated that psilocybin can engender rapid antidepressant effects that even outlast the presence of the substance in the body. However, it is unclear for how long these antidepressant effects last and whether these antidepressant effects can be replicated in the context of clinical trials with more robust design methodologies. This study aimed to evaluate the magnitude, timing and durability of antidepressant effects and safety of a single dose of psilocybin in patients with major depressive disorder (MDD).

What The Researchers Did. This study is a randomized, two-group, phase two clinical trial utilizing a multi-blinded design comparing the effects of a single dose of psilocybin (25 mg) to an active placebo comparator, niacin (100 mg), with outcome assessments also conducted by blinded central raters. In this study, niacin was considered an active placebo as it produces an acute physiological flushing response which is thought to aid in blinding. This trial was conducted across 11 sites in the United States from December 2019 to June 2022. After thorough screening procedures and medical tapering (if needed), 104 participants (50% women; 83.7% White) were randomized into the psilocybin group (n = 50) or the niacin group (n = 54). Psilocybin-treatment or niacin-control was provided in the context of psychosocial support in a hospital setting. Efficacy of the dosing session was evaluated utilizing the Montgomery–Åsberg Depression Rating Scale (MADRS), a 10-item scale measuring depressive symptoms severity. MADRS scores were evaluated at baseline and on days two, eight, 15, 29, and 43 after dosing. The researchers reported adjusted effect sizes based on standardized mean differences (SMD) with 95% confidence intervals.

Primary Findings & Take-Home Message. For overall efficacy, the psilocybin-treated group showed greater change in depressive symptom severity compared to the niacin-control group, with the mean difference of change between the groups being -12.3 (95% CI [-17.5, -7.2]). Specifically, the psilocybin-treated group indicated a decrease of -19.1 (95% CI [-22.7, -15.5]) at day 43, compared to a decrease of -6.8 (95% CI [-10.5, -3.1]) for the niacin group. Comparing the groups based on sustained depressive symptom response, there was greater sustained response in the psilocybin-treated group (42%) compared to the niacin group (11%). Regarding safety, the researchers report that psilocybin was generally well-tolerated, with the majority of adverse events being of mild or moderate severity and being generally limited to the dosing period. Overall, the severe adverse event rate in those receiving psilocybin was 8% (n = 4) compared to 0% in the niacin group. These included migraine, headache, illusion, and panic attack/paranoia.

Taken together, the researchers suggest that a single 25 mg dose of psilocybin administered with psychosocial support was associated with clinically significant reductions in depressive symptoms in a treatment population with MDD. These results indicate that psilocybin in the context of clinical care could represent a novel and effective intervention for MDD.

The views expressed in this article are solely the author’s and do not represent the views of the Department of Psychiatry and Behavioral Sciences at the Johns Hopkins University School of Medicine or the Johns Hopkins Center for Psychedelic & Consciousness Research.
References


Understanding the public health impact of cannabis use is increasingly important amidst increased legal access. Using a patient-centered approach focused on individual susceptibility to investigate cannabis use health outcomes may maximize public benefit.

Cannabis is the third most widely used psychoactive substance worldwide (UNODC, 2023). In October 2018, Canada became the second nation in the world to legalize cannabis, reflecting a growing trend across North America and beyond of legislative change producing increased cannabis access through established legal markets. In the United States, thirty-eight states and Washington D.C. have legalized cannabis (Rogers, 2023). While cannabis remains federally illegal and is classified as a Schedule I drug under the Controlled Substances Act, the U.S. Department of Health and Human Services recently recommended that the federal government reclassify cannabis to Schedule III (alongside ketamine, testosterone, and acetaminophen-codeine combinations) (Griffin, 2023). Fortunately, removing cannabis from the Schedule I classification will also remove barriers for conducting research on cannabis use. Increased research into potential health outcomes of cannabis use is required so individuals may make informed decisions about their use amidst increased access to cannabis and cannabis-derived products. Increased access is presently coinciding with decreased public knowledge about the potential adverse effects of cannabis, especially in youth (for review see Carliner et al. (2017)). Decreases in the perceived harmfulness of cannabis may be partially attributable to increased positive messaging from the cannabis industry coupled with a lack of knowledge translation from health providers, educators, and physicians (Adewale et al., 2023; Balneaves et al., 2023; Kulak et al., 2023; Najafizada et al., 2022; Poisblaud et al., 2023). Consequently, increased research on cannabis use outcomes is urgently required to inform cannabis users who are presently also informed through alternative and sometimes unsupported sources.

Earlier this year, in an article titled Changes in Cannabis-Attributable Hospitalizations Following Nonmedical Cannabis Legalization in Canada, Myran et al. (2023) presented an investigation of cannabis-related hospitalizations before and after legalization from four provincial health administration databases in Canada. The authors identified cannabis-related hospitalizations when the main or contributing reason for hospitalization was a diagnosis of either 1) poisoning by cannabis/derivatives or 2) mental and behavioral disorders due to cannabinoid use. Specific diagnostic types included in the analyses were 1) acute cannabis intoxication, 2) harmful cannabis use, 3) cannabis dependence, 4) cannabis withdrawal, 5) cannabis-induced psychosis, 6) cannabis poisoning, or 7) mental and behavioral disorders due to cannabinoids use. Cannabis-related hospitalization rates were assessed during periods of pre-legalization (January 2015 to September 2018), post-legalization (October 2018 to February 2020), and commercialization (March 2020 to March 2021). The beginning of the pre-legalization period was January 2015 as this was the earliest period where health data could be matched across provincial records. The post-legalization period was defined as being from October 2018 to March 2020, after which the post-legalization period transitioned to...
the commercialization period characterized by increased product access and store growth. The end of the commercialization period was defined as March 2021 for this study.

Based on their analyses, Myran et al. (2023) reported that a total of 105,203 cannabis-related hospitalizations occurred in Canada between January 2015 and March 2021, with the most common reason for cannabis-related hospitalizations being for harmful cannabis use (46.2%), followed by cannabis dependence (19.9%), other (16.8%), and finally, cannabis-induced psychosis (9.7%). Additionally, they reported that the largest absolute increase in cannabis-related hospitalizations was for harmful cannabis use (35.16 during commercialization vs 29.15 pre-legalization per 100,000 person years), while the largest relative increase was for cannabis-induced psychosis (rate ratio, 1.40; 95% CI, 1.34 to 1.47) during commercialization relative to pre-legalization and for cannabis withdrawal (rate ratio, 1.37; 95% CI, 1.20 to 1.56) during legalization relative to pre-legalization. From this, the authors concluded that cannabis commercialization, but not legalization, was associated with increased cannabis-related hospitalizations, specifically highlighting increased rates of cannabis-induced psychosis during the commercialization period (from 9.29% pre-legalization to 11.02% during commercialization). Myran et al. (2023) also inferred that commercialization potentially reversed an initial public health benefit (i.e., decreased cannabis-related hospitalizations) observed after legalization (see Figure 1 from Myran et al., 2023, p. 5). Taken together, the authors have provided a much-needed analysis of how different types of cannabis-related hospitalizations changed across Canada since legalization and suggest a potential public health benefit of controlled (not commercialized) legal access.

Figure 1. Age and Sex Standardized Rates of Hospitalizations Due to Cannabis for All of Canada

Population-level, cross-sectional investigations of health data provide a crucial window into how legal cannabis access is impacting public health. The report produced by Myran et al. (2023) adds to a growing body of literature investigating emergency department visits attributable to cannabis use since legalization (Myran et al., 2022; Yeung et al., 2020), and yet is limited in assessing or controlling for the factors influencing whether a user experiences adverse outcomes of cannabis use. While their major finding was

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increased hospitalizations for harmful cannabis use during commercialization compared to pre-legalization, the diagnosis of harmful cannabis use itself is inherently broad and subjective; a diagnosis of harmful cannabis use is made when patients present with clinically significant problems associated with their cannabis use, yet are not using cannabis compulsively (Degenhardt et al., 2019). Unfortunately, the unspecific nature of this measure complicates further interpretation of their results. Myran et al. (2023) reported potential limitations of their analyses including possible confounds related to data exclusions or increased patient willingness to report cannabis use post-legalization, as well as the COVID-19 pandemic overlapping with the cannabis commercialization period. However, an acknowledgement of the potential confounds introduced by the COVID-19 pandemic is not enough: data reporting increased cannabis-related hospitalizations during the COVID-19 pandemic must account for the influence of related environmental factors such as stress. Indeed, stress is a major factor in determining whether an individual experiences adverse effects of cannabis (Jones, 1971; Szuster et al., 1988). In the report published by Myran et al., (2023) the relative increase in cannabis-induced psychosis between pre-legalization and commercialization does not account for whether individuals were experiencing atypical levels of stress, had a pre-existing anxiety-related or other mental health concern, or were using specific types of cannabis-derived products (such as the highly potent extracts, oils, distillates, etc. that emerged on the market at that time). Given this, it may be of added benefit to center future investigations on the patient, in order to research how different cannabis users or non-users experienced such a broad stressor as the COVID-19 pandemic and how this influenced cannabis-related hospitalization rates.

Public health interest in harms attributable to cannabis use is especially understandable amidst a transition from cannabis prohibition to commercialization. As increased product access and store growth continues to inform and influence the potential health outcomes for cannabis users, researchers must similarly increase investigations of how specific products affect different subtypes of users. Only then will knowledge translation efforts begin to align with the rapid commercialization and diversification of cannabis. Adopting patient-centered approaches to evaluating public health outcomes of legal cannabis access will optimize investigations by focusing on individuals who are disproportionately liable to experiencing the negative consequences of use; individuals for whom we can focus harm reduction or abstinence promotion efforts. A patient-centered approach will involve the prioritization of disadvantaged individuals in the development of equitable guidelines for legal cannabis access, such as the recent extension of the Grading of Recommendations, Assessments, Development, and Evaluation (GRADE) framework for developing clinical guidelines to include an equity criterion (Dewidar et al., 2023). The need for a renewed focus on at-risk populations when investigating cannabis use outcomes is particularly salient for patients with serious mental illnesses such as schizophrenia who are using cannabis at alarmingly high rates, and whose clinical outcomes may be significantly worsened by cannabis use (Foti et al., 2010). Legal cannabis access is here to stay – patient-centered approaches to investigating public health outcomes of cannabis use will optimize research efforts and maximize public benefit.

The views expressed in this article are solely the author’s and do not represent the views of the Division of Behavioral Biology or the Department of Psychiatry and Behavioral Sciences at Johns Hopkins University School of Medicine.
References


Amazing Progress

Jin Lee – “The effort to pass the Colorado RxP legislation began in 2019, but the journey has been undeniably challenging, marked by long hours, intricate negotiations, and an unwavering commitment to achieving the best for the field of psychology and the community in Colorado. As a leader spearheading this transformative initiative, the road was paved with countless discussions, meticulous planning, and collaborative efforts. The urgency to navigate the complex regulatory landscape demanded an extraordinary level of dedication from the entire team of the Colorado RxP task force, as we strived to ensure that prescribing psychologists could make meaningful contributions to mental healthcare in Colorado.

“The speed at which we were able to finalize the rules and regulations within 8 months from signing the Colorado RxP bill stands as a testament to the collective passion and professionalism of everyone involved. It was a collaborative journey that brought together professionals from diverse backgrounds, each contributing their unique expertise to the cause. The success of this legislative push is not just a personal achievement, but rather a triumph for the entire community of prescribing psychologists who rallied behind a common vision. I am incredibly proud of the resilience and tenacity displayed by all those who helped, as we collectively worked towards enhancing the scope and impact of psychology. The rewards of this journey are not just reflected in the legislative victory, but in the prospect of improved mental healthcare for the people of Colorado, as shown in other RxP states historically.

“As we celebrate this remarkable success of advancing the Colorado RxP legislation and solidifying the accompanying rules and regulations at an unprecedented speed, I feel a sense of accomplishment and pride that I pass the torch to the next leader in this transformative journey. Brian Seavey, the newly appointed Chair of the Colorado Psychological Association CO RxP Division, now assumes the pivotal role as the point of contact for this groundbreaking initiative. As I transition into a new phase, I’m confident that his wealth of experience and dedication as a prescribing psychologist will ensure the continued progress and flourishing of prescribing psychology in our state.”

Steve Ragusea – “RxP in Pennsylvania continues to advance. As you may know, we introduced HB.1000 into the Pennsylvania legislature this year, which is the second time we’ve had a bill sponsored in the Commonwealth. The bill is currently in the Professional Licensure Committee and showing bipartisan support. When the bill was first introduced, the medical society never even bothered to comment on the bill. But recently the physicians have started to advance the same old arguments they furtively used against psychology when we first sought licensure, third party payment, and Medicare recognition. Of
course, they’ll lose the arguments just as they did 50 years ago. Psychology continues to dominate the world of mental health providers as we arguably have proven to be the best educated, fastest growing, and most widely respected of the mental health professions because we have the best training model. Now as we pursue advancement in psychopharmacology, the medical folk complain that psychologists are not adequately trained and ‘dangerous’ even though psychologists have been prescribing safely and effectively in multiple states, the military and in various other domains for over a quarter century. When the medical societies are asked if they have any research to support their fears, they eventually answer ‘no,’ they do not. So far our legislators are not impressed by the same old stale tripe, and we expect HB.1000 to be voted out of the Professional Licensure Committee within the next few weeks.”

Psychology’s Voice Being Heard

Katherine McGuire, APA Chief Advocacy Officer, reflecting on a year of incredible advocacy in which clinicians, educators, students, and researchers collectively leaned in to elevate many issues key to psychology: “Our advocates had a tremendous impact this year. Psychologists participated in over 600 meetings with Congressional offices during two advocacy summits, leading to the introduction of two APA Services priority bills: the Accelerating the Development of the Advanced Psychology Trainees (ADAPT) Act (S.2511), and the Youth Mental Health Research Act (S.3060/ H.R.5976).

“In addition, psychologists sent over 27,000 messages to Congress and the Biden Administration. These messages covered key issues facing the field of psychology and our society, including: strengthening the psychology workforce; investing in youth mental health research; protecting access to mental and behavioral health services for vulnerable and underserved populations; and advancing parity between mental and physical health services. In fact, when responding to the Biden Administration’s annual Physician Fee Schedule proposed rule, for the second year in a row psychologists made up the largest share of comments submitted from a single field.

“Finally, APA Services secured some big wins last month. On November 8th, the Senate Finance Committee advanced the Better Mental Health Care, Lower-Cost Drugs, and Extenders Act in a unanimous vote. Key policies that APA Services fought hard for included provisions that mitigate the scheduled 3.4% cut to the Medicare conversion factor that the Centers for Medicare & Medicaid Services (CMS) has planned in the Physician Fee Schedule for 2024. In addition, the legislation included the expansion of eligibility for Medicare health professional shortage area bonus payments to psychologists, increased incentives for behavioral health integration within primary care, and requirements that Medicare Advantage plans provide accurate, up-to-date directories of providers.

“Our members form the backbone of our advocacy, and we are incredibly proud of what they have accomplished this year. This extraordinary advocacy not only highlights the commitment of our members to the betterment of society, but also underscores the crucial role psychology has in shaping pressing issues facing the nation. As the year draws to a close, our advocacy is far from over. The wins that emerged in 2023 underscore the ongoing need to keep the momentum going in 2024 and further advance these key policies.”

The Fiscal Year 2024 National Defense Authorization Act: The U.S. Senate, on a bipartisan basis, recommended several provisions which should be of considerable interest to our nation’s mental health professionals, especially as they reflect the growing societal awareness of the importance of mental health care. Recruit waiver: “The Committee is concerned that the percentage of Americans eligible for military service is shrinking in the midst of a recruiting crisis. Only 23 percent of the 17- to 21-year-old population
meets eligibility criteria to join the military without some sort of waiver. The committee appreciates that the services have begun to modify some standards that serve as barriers to entry but do not negatively impact an individual’s ability to serve. However, some issues such as mental health treatment continue to be subject to stringent disqualifying standards. While the committee appreciates there is a waiver process in place for many of these issues, that process is long and cumbersome.

“The committee notes that there is a relatively high percentage of adolescents who experience issues with anxiety or depression. Many of those seek help and are able to manage or eliminate their symptoms. Automatically disqualifying these individuals or requiring a lengthy waiver process likely eliminates a significant population able and willing to serve. The committee also notes that work has been done indicating largely positive outcomes for individuals who currently require a waiver for specific medical conditions or nonviolent criminal behavior.

“Therefore, the committee directs Secretary of Defense... to submit a report to the congressional defense committees that describes Department of Defense efforts to expand recruitment eligibility by modifying the recruiting standards and waiver processes. The report should include: (1) A discussion of medical accession standards including... with a special emphasis on accession standards related to general anxiety and depressive disorders....”

Transitioning servicemembers’ mental health concerns: “The committee notes that servicemembers continue to struggle during the transition from active duty to civilian, especially as it relates to issues impacting mental health. As a means of reducing the incidence of suicide among veterans, the Department of Defense is encouraged to work with the Department of Veterans Affairs to continue to provide transition assistance, specifically as it relates to support and resources for veteran-specific mental health issues.

“Accordingly, the Secretary of Defense is directed to provide a briefing on the following issues to the Committees on Armed Services of the Senate and the House of Representatives not later than March 1, 2014: (1) A summary of existing transition programs aimed at providing mental health support and assistance to pre-separation and transitioning servicemembers; and (2) The feasibility and advisability of a study on providing in-person meetings between a cohort of servicemembers and a social worker or nurse, with the goal of: (a) Educating the cohort on specific mental health risks to servicemembers as they transition, such as loss of community or support system; isolation from friends, family, or society; identity crises; self-medication and addiction; importance of sleep and exercise; homelessness; risk factors contributing to attempts of suicide and deaths by suicide, and the signs and symptoms of suicide risk; and (b) Educating the cohort on the availability of resources through the Department of Veterans Affairs as part of the pre-separation transition process for members of the Armed Forces.”

Exclusion from limitations on Active-Duty commissioned officer end strengths: “The Committee recommends a provision that would... exclude licensed behavioral health providers, including clinical psychologists, social workers, and mental health nurse practitioners, from the authorized strength of commissioned officers on Active Duty in grades of major, lieutenant colonel, and colonel, and in Navy grades of lieutenant commander, commander, and captain. A similar exclusion currently applies to medical and dental officers. The committee is concerned about the shortage of behavioral health providers in the military and believes that the Department will benefit from the flexibility to recruit, access, and retain a greater number of behavioral health providers.”
What Intrigues Those in APA Leadership?

Diana Prescott, who admirably represents the interest of those residing in Rural America during APA conventions and in various policy deliberations, is a frequent participant in numerous Psychology PAC events, such as the one honoring Representative Brian Fitzpatrick, as well as the PAC’s scheduled visits to Capitol Hill. Her reflections: “JOY. I was blessed to be able to visit my beloved Indiana and Butler University in October for my college Homecoming. While attending a Friday night reunion, an old friend, Nick Hopkins who dated my sorority sister Sharon Williams, came up to say ‘hello.’ I hadn’t seen him for 10 years. He asked me, ‘What brings you joy?’

“I was drawn up short. After all, I am a psychologist, and this is what I do for a living – I help people find joy in their lives. I didn’t have a quick answer and mentioned I enjoyed yoga. Nick’s question, prompted in part by his own retirement from working as an attorney, has rolled around in my mind since Homecoming. What brings me joy? During the pandemic, I spent a good deal of time considering my daily gratitude list. As we know, this is a good practice leading to improvement in mental health. As clinicians, we are in the business of helping people feel better. We should be laser-focused on what brings joy in our own lives and in those of others.

“I went back to Nick with a follow-up question to understand more about his reasons for asking the question, and he shared his list, inviting me to also share mine. My first thoughts were of the love, friends, and family who bring joy into my life. Professionally, I find joy in supervising doctoral students and working with clients in therapy. Personally, I like to walk, listen to music, enjoy nature, contact friends, attempt to organize my spaces, watch reality television, take photos, and curl up with my pets. I would challenge you, my friends, to ask yourselves, ‘What brings you joy?’”

Diana’s passion for rural America is very important for that segment of our nation, both within APA by serving on the Committee on Rural Health (established by former APA President Jack Wiggins) and externally by raising rural issues with those who shape critical state and federal policies. Steve Ragusea: “Many people think that the large rural populations are out in the Wild West but, that is a serious misperception. The big rural populations aren’t in Montana or North Dakota or Wyoming, they are actually where you’d least expect them. For example, the Commonwealth of Pennsylvania, the state housing the two major metropolises of Philadelphia and Pittsburgh, is also the state with the third largest rural population in the United States. That’s over three million Pennsylvanians living in rural environments tucked into ‘hollers’ between mountains, on hillsides, far away from any big city. These folks often will drive four hours to get to the big city clinics in Pittsburgh and Philadelphia for their medical and mental health care. The same is true for the lovely state of Vermont, which has 65% of its citizens residing in rural environments, which is the largest population percentage of any state in the nation. Where do they travel for their health care? Boston, 250 miles away.”

Supporting the views of Diana and Steve, The Commonwealth Fund recently released its report Helping Older Adults Age Well in Rural America. “Rural communities in the United States struggle to care for aging adults: there are fewer health care providers, fewer professional caregivers, and fewer young people than in urban areas. With many services hours away, older adults are often forced to leave their homes or go without care.” Highlights: Approaches that mobilize local assets -- like health and human service organizations, leveraging telehealth, team-based care, and home visits -- make it easier for older adults to access services. Many rural older adults have lived their whole lives in the same small towns, some in the same homes. They tend to want to age in their communities, amid familiar people and places. Continuing to help them stay at home and stay well longer, helps these communities thrive.
From 2012-2016, older adults made up a higher share of the population in rural counties, than in urban and suburban ones. Where there is population growth, it is being driven by arrivals of people from other countries. On average, rural residents travel twice as far as urban residents to reach medical or dental care. Rural older adults also report unmet needs for affordable food and transportation; older rural immigrants often need legal and translation services. Creative approaches such as the Programs of All-Inclusive Care for the Elderly (PACE) are critical; yet, nationally only 24 of the 151 PACEs are rural. The development of “age friendly” clinics, rural hybrid care models, effectively utilizing nursing and paramedics, can improve health outcomes, especially by helping people to manage their own health conditions.

Lessons Learned – * To identify problems and create solutions, advocates should partner with older adults. * Rural providers need resources and technical assistance. * Regulatory changes could/should enable collaboration. * Creative approaches are needed to address workforce shortages (including perhaps paying family members to care for elderly relatives). And, * Health care payers and health systems should invest in what’s been shown to work – home based primary care and community paramedicine. “If older adults are having to travel for health care or other services, pretty soon it just becomes too overwhelming. They just move to (the city). Then those communities lost their population and their people, their stories, their history. And economically, too, it’s a big impact on the community.” “Close your eyes…. Throw your hands up to the sky” (Michael Franti & Spearhead, Hands Up To The Sky).

Aloha,

Pat DeLeon, former APA President – HPA – December, 2023