

PSYNAPSE

THE NEWSLETTER OF THE CPA'S PSYCHOPHARMACOLOGY SECTION

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A MESSAGE FROM THE EDITOR

Bryan Butler, M.A.
Newsletter Editor

Dear members of the Psychopharmacology Section,

It is my pleasure to present our first newsletter of 2022! We have an exciting collection of articles written by section members and our colleagues from APA's Division 55: Society for Prescribing Psychology. Also included is the section's response to the newly proposed 6th Revision of the Accreditation Standards for Doctoral and Residency Programs in Professional Psychology. Lastly, I would also like to introduce and thank Thomas Qiao, a master's student at the University of Calgary who has helped to edit and compile the newsletter.

A CALL FOR NEW SECTION EXECUTIVE MEMBERS

We are currently looking for new members of the section's executive committee! If you are interested in joining the section and helping to further the Canadian RxP movement, please contact our Section Chair Dr. Amir Sepehry (sepehryaa@gmail.com) for more information.

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 and staying safe during these challenging times.

Kind regards,

Bryan

A MESSAGE FROM THE SECTION CHAIR

Amir A. Sepehry, PhD
Psychopharmacology Section Chair
Canadian Psychological Association

Dear Members of the Canadian Psychological Association (CPA) – Psychopharmacology Section,

As a chair of the section, I am committed to finding ways to strengthen voices of the membership cooperatively for a better professional future. It is my pleasure to bring you our first PSYNAPSE newsletter of the 2022, informing you of our recent great feat, and upcoming 2022 annual convention.

To this end and in collaboration with the executive members of the Psychopharmacology section, on December 3rd & 4th of last year, we have prepared and submitted a statement regarding the proposed 6th Revision of the Accreditation Standards for Doctoral and Residency Program in Professional Psychology. The letter was sent to Dr. Madon, Registrar, Accreditation, & Ethics Officer for the Canadian Psychological Association. See the attached letter available in Appendix A of this newsletter.

Within the newsletter, you will read also about the pre-doctoral prescriptive authority (RxP) training from Dr. Robert Ax and Dr. David Nussbaum; an article from Dr. Dubro on “An alternative model for the pathophysiology of schizophrenia”; and two articles from Dr. DeLeon (Former president of the APA) titled “raindrops they hamper my vision...while we sail away our time” and “I’ve been a puppet, a pauper, a pirate, a poet, a pawn and a king”. Additionally, you will read the message from the editor of the section that calls for new executive members, and contributions.

Amid the SARS-COVID-19 pandemic, we have recently seen new developments regarding drug/medication development and utilization for prevention, protection, or for reliving mental-health related issues (e.g., anxiety, depression, stress). I hope graduate student members of the section, or members working with various research and development (R&D) section of companies and universities to submit early discoveries short abstracts, notes, commentaries, and editorials, in either in English or French, for us to consider for publication in the newsletter.

Additionally, I would like to bring to your attention the upcoming 2022 CPA annual convention that will be held in Calgary, Alberta (June 17-19) [<https://convention.cpa.ca>]. Noteworthy that, according to the CPA, the convention on average hosts between 1,600 – 1,900 scientists & practitioners of psychology. We have received several abstracts for symposia and poster presentation and are under review. Those accepted after being reviewed will receive notice of decisions and will be invited for presentation at the convention. The registration of the convention will open soon, in early February.

Happy reading and happy new year,

Amir A. Sepehry, PhD
Psychopharmacology Section Chair
Canadian Psychological Association

PRE-DOCTORAL PRESCRIPTIVE AUTHORITY (RxP) TRAINING: A NEW OPTION

Robert K. Ax, Ph.D. and David Nussbaum, Ph.D.

When the American Psychological Association (APA) recognized prescriptive authority (RxP) as organizational policy in 1995 (Martin, 1995), the only acceptable training model under its terms was post-doctoral. Applicants had to complete their degrees prior to commencing their clinical psychopharmacology training in degree-granting or certificate-only programs.

This remained the case for decades. Yet from the beginning, there were intimations that this wasn't the only feasible or desirable curriculum. Several surveys of RxP attitudes documented a preference for such training to begin prior to receipt of the doctorate (Boswell & Litwin, 1992; Ax, Forbes, & Thompson, 1997; Fagan et al., 2007; Simpson & Kluck, 2007).

In fact, a pre-doctoral RxP training program operated at the Forest School of Professional Psychology for years, awarding a Psy.D. and a certificate in clinical psychopharmacology. However, with the clear trend towards postdoctoral training, it proved unviable at the time. According to Dr. Mark Skrade, the President of Forest at the time, there seemed to be:

- no indication that if a student completed [the program] that they would be able to get licensed and be able to prescribe. It seemed irresponsible regardless of my belief that it was a completely appropriate and manageable level of education and training for doctoral students (M. Skrade, personal communication, September 15, 2009).

Several pre-doctoral clinical psychopharmacology training models were proposed during the early RxP years (Balster, 1990; Chafetz & Buelow, 1994; Fox, Schwelitz, & Barclay, 1992), and others more recently (Tulkin & Stock, 2004; Ax, Fagan, & Resnick, 2009; Resnick, Ax, Fagan, & Nussbaum, 2012). In 2014, Illinois enacted an RxP law (SB 2187) that, for the first time, permitted training to commence at the pre-doctoral level.

In another important precedent, APA's revised Designation Criteria for Education and Training Programs in Psychopharmacology for Prescriptive Authority (2019) allowed graduate students to take pre-doctoral training in clinical psychopharmacology, although postdoctoral clinical fellowships remain exclusively postdoctoral (Brown et al., 2020).

And pre-doctoral RxP training is now a reality. The Chicago School of Professional Psychology (CSPP) now offers a master's degree program in clinical psychopharmacology that is open to students at the pre-doctoral level (CSPP, n.d.) That is a real game-changer. If the CSPP program succeeds, others will certainly follow.

The M.S.-Doctorate Combination

To be clear, what's under consideration here is a joint-degree (M.S. in clinical psychopharmacology combined with a Ph.D. or Psy.D. program) model. The degrees could be earned at the same school or at different ones, but the M.S. program is begun prior to the receipt of the Ph.D. or Psy.D. (For a more detailed discussion of the various possible pre-doctoral training models, see Resnick et al., 2012.) "Designation" for RxP training is analogous to APA- or CPA-accreditation, the applicable term for graduate programs, internships and post-doctoral residencies. To date, no certificate-only (non-degree) programs have received APA designation (APA, n.d), and no such programs appear to be active anymore.

At this time, five M.S.-degree programs, all based in the United States, have received APA designation status. They are housed in Alliant International University, The Chicago School of Professional Psychology, Fairleigh Dickinson University, Idaho State University, and New Mexico State University (APA, n.d.). It's also important to note, due to past confusion about the matter, that the pre-doctoral curriculum is an emerging option, and is not being advanced as a replacement for the now-standard post-doctoral RxP training model.

Advantages of Pre-Doctoral Training

The conditions are now in place for the proliferation of pre-doctoral RxP training programs in the United States. It's likely that the next few years will bring the validation of this training model, as more students enroll, graduate, and begin prescribing; as more states sanction such a curriculum; and as the advantages become clearer. (For a more detailed discussion of many of the points in this section, see Ax et al., 2009.) Potential advantages of pre-doctoral RxP training include:

- *For the public:* Increasing the number of care providers by building on the public service/health foundation that served as the impetus for RxP, from the US military's Department of Defense Psychopharmacology Demonstration Project, through the APA Division 18-Alliant International University training project, and continuing with state authorizing legislation that has been grounded in RxP's potential to provide care for underserved populations
- *For students:* Beginning and completing graduate work earlier (and potentially avoiding the opportunity cost of additional time spent in school); entering the workforce with a broader, more useful, competitive skill set; being a better fit on integrated care teams from Day One.
- *For schools:* Accommodating consumer and market preferences (see above) for RxP training to commence earlier in the graduate school sequence; attracting applicants with a stronger undergraduate education in the natural sciences, i.e., the coursework that serves as a foundation for the M.S. and prescribing; creating and maintaining a competitive, innovative training program.
- *The profession:* Normalizing clinical psychopharmacology as part of psychology's "identity" – as acceptable as a geriatric, child, or forensic specialty; conducting and publishing research, e.g., on combined (psychotherapy and pharmacological) interventions; growing and evolving with the times, thus remaining relevant as a science and a healthcare profession.

Implications and Opportunities

Should Canadian RxP advocates support a pre-doctoral training model, perhaps in tandem with the post-doctoral curriculum? What do the members of this Section think? What would we be willing to advocate for in terms of CPA policy?

Training and political action are mutually supportive, but by and large, training precedes the success of authorizing legislation. Viable RxP training programs are the foundation for proof of concept. Over time, they provide a quantifiable practitioner base, the human capital resource politicians and government officials can use in calculating the cost-benefit on authorizing legislation or agency policy, such as demonstration projects. It's less risky to sponsor an RxP bill if there are 50 properly trained psychologists in

your province or state who are ready to step up and provide care to your constituents than if there are few or none.

A training program based in Canada would speak to the profession's investment in RxP's future. What schools might be interested in hosting an M.S. program? Our Section members could investigate. By what criteria should a Canadian RxP curriculum be formulated? Presumably, APA's (2019) designation criteria would be useful, but CPA's CPA Task Force Report on Prescriptive Authority for Psychologists in Canada (2010) offers helpful guidance as well. We as a Section could and should have input, too. Should Canada adopt the Psychopharmacology Examination for Psychologists (PEP) as the capstone competency evaluation? Something else? What about a supervised clinical fellowship requirement? This Section should play an active part in such discussions.

Maybe the best place to start is at the entry to the RxP "pipeline." The first recommendation of the CPA Task Force Report on Prescriptive Authority (2010) was "...that basic clinical psychopharmacology knowledge, such as could be obtained from a survey course or an equivalent experience, be made a specific Canadian Psychological Association accreditation requirement."

This is a worthy aspiration, more specific than the relevant language in the most recent CPA Accreditation Standards and Procedures for Doctoral Programmes and Internships in Professional Psychology (2011). Such a requirement would better prepare all Canadian pre-doctoral students in health care psychology for working with patients, whether or not they eventually sought prescriptive authority. Non-prescribing Canadian psychologists will have patients who take psychotropic medications prescribed by physicians, including psychiatrists, and others who utilize non-prescribed drugs for recreational or self-medication purposes. Appreciation of the effects and mechanisms of various drugs' impacts on cognitive, motivational, emotional, perceptual, motor and energy levels will certainly enhance psychologists' ability to interpret psychological test results and the effectiveness of psychotherapy by understanding the relative contributions of the therapeutic relationship, the drug(s), and psychotherapy-drug interactions. Fortuitously, the next revision of the standards is scheduled for public review and comment this fall, and it would behoove us as a group of subject matter experts to consider the draft document and raise our voices to ensure that "a survey course or an equivalent experience" in clinical psychopharmacology be made an accreditation requirement in the final edition.

And we can go on from there. An M.S. program in clinical psychopharmacology, perhaps offering both post-doctoral and pre-doctoral tracks, and based at a Canadian university is a realistic goal – if we're willing to work for it.

Robert K. Ax, Ph.D. is a Fellow of APA, a member of the Canadian Psychological Association, and the former president of APA's Division 18 (Psychologists in Public Service).

“RAINDROPS THEY HAMPER MY VISION... WHILE WE SAIL AWAY OUR TIME”

Pat DeLeon, Ph.D., MPH, JD (former APA President)

The Maturing RxP Agenda

Hawaii was the first State Psychological Association to seriously consider the potential benefits for psychologists obtaining prescriptive authority (RxP), shortly after U.S. Senator Daniel K. Inouye addressed the November, 1984 HPA convention issuing that challenge: “to improve the availability of comprehensive, quality mental health care.” Although still not yet successful, we are pleased that HPA is continuing this important quest. During the 2009 Hawaii Senate Health Committee hearings, the NASW Hawaii Chapter submitted supportive testimony for RxP in federally qualified health centers (FQHCs), noting: “NASW supported this issue in 2006. We have been silent for the last 2 years to allow the medical profession to step forward and fill the need as they testified they would be able to do. Two years have gone by and we find the situation as dire as we did in 2006. We can no longer be silent and must speak up for those who need mental health care. Currently, there are 20 psychologists who have received psychopharmacological training through the Tripler Army Medical Center psychology training program and are already practicing collaboratively with primary care physicians at 11 FQHCs.”

A health center Medical Director presented similar testimony. “The Waimanalo Health Center fully supports this bill in order to broaden the scope of services so badly needed by Hawaii’s Community Health Centers’ ability to serve the myriad of patients who present to our centers needing mental health services. For our health center approximately 8% of the clients we serve have a mental health or substance abuse condition.... Our practitioners face day-to-day dilemmas in knowing that their patients’ medical and mental health conditions won’t improve without such needed services, yet they do the best they can. Practitioners who work in our centers deserve this type of back up and support. We believe that this measure could create a model that can have the greatest impact on the mental health of underserved communities.”

Perhaps most impressive: “As the former Director of Training of the Department of Defense Psychopharmacology Demonstration Project (PDP), I would like to provide you with a brief history of the program and my assessment of the program’s similarities to the training being proposed in SB428. In response to directives from the U.S. Congress, the Department of Defense began to train psychologists to prescribe psychoactive medications in 1991. The program went through a number of iterations and refinements, eventually resulting in a curriculum that consisted of 660 hours of coursework and a one year practicum experience treating no less than 100 patients. Had the program continued, there would have been further refinements of the coursework and the elimination of didactic elements that were found to be of limited relevance to the practice of psychologists prescribing psychoactive agents.

“I have reviewed the training requirements outlined in SB428.... It is my considered opinion as a physician, a psychiatrist, and the former Director of Training of the DoD PDP, that the training outlined in SB428 is essentially equivalent to the instruction and relevant experiences that was provided to the PDP students.

The training required in SB428 is more than adequate to produce competent and safe prescribing psychologists. It is similar to the standards currently set by the U.S. Navy, U.S. Air Force and states where psychologists have been safely prescribing for a number of years.

“Following the completion of their training, the PDP graduates served with distinction in all branches of the service. The care they provide, to include prescribing a broad range of psychoactive medications, was deemed by their superiors to be safe, efficacious, and of the highest quality. I would expect the same of those that will graduate from the training program in Hawaii” (Marvin Oleshansky, M.D., Colonel (retired), U.S. Army Medical Corps).

Beth Rom-Rymer: “As APA President, I would draw heavily on my two-term experience as President of the Illinois Psychological Association, to advocate for continued APA funding for state legislative efforts and for a national task force, chaired by an expert in Prescriptive Authority national legislation advocacy, that would, in conjunction with APA’s Division 55 (Society for Prescribing Psychology) and every State Psychological Association legislative committee, highlight, train for, support, and track, the necessary steps to successfully pass Prescriptive Authority legislation, state-by-state.”

“I have just heard of the untimely passing of Jim Quillin ‘Q’. A pioneering, innovative thinker, activist, prominent leader of our Prescriptive Authority Movement, ‘Q’ created significant and savvy legislative/political changes for psychologists in Louisiana, from which all of us learned. We will cherish and honor his memory.” “If we don’t quit, we win!”

Significant Policy/Practice Changes Always Take Time

Dale Smith, USU Professor of Military Medicine & History: “Took over thirty years for states to decide to license physicians, over fifty-five years to decide to require an internship to practice. You are on track with history.” VA Psychology & Public Service Historian, Rod Baker: “While still in APA governance before I retired almost 20 years ago, I remember reminding everyone that the kind of change we were talking about takes time, and I predicted it would happen eventually. Pushed for by folks like Bob Ax, Randy Taylor, and Kathy McNamara, Division 18 certainly did its part in the 1990s. The Division’s 2004 decision to partner with Alliant University to train public service psychologists in a master’s program in clinical psychopharmacology supported by grants and gifts was a bold step. It was obvious to us in VA psychology leadership that VA Central Office leadership (Chief Medical Director level) supported our efforts, but clearly said to the effect – ‘We support it but the VA will not be the first federal agency to approve RxP for psychologists.’ I personally thought it would take at least 20-25 years for the VA to get on the RxP issue, but for many reasons, I’m less inclined to believe that timetable will hold. Is the issue that the students and Early Career members of APA simply do not understand or accept the importance of RxP to their patients and their profession? Who are their role models?”

A Unique Training Opportunity

As an increasing number of psychology and nursing graduate students participate in the Uniformed Services University (USU) Bushmaster experience, we would hope that they will share this unique “hands-on” experience with their state association colleagues. USU Director of Psychology Clinical Training, Jeff Goodie (CAPT. USPHS): “This year we were able to add a virtual mass casualty exercise (MASCAL) during which the behavioral health students practiced providing support to patients in distress, intervening with medical providers freezing due to the stress of the situation, and providing manpower support. Bushmaster not only allows psychology and nursing students to understand each other’s roles, but it also gives medical students an opportunity to observe how behavioral health services and consultation would be delivered in deployed settings.”

Major Twana Hadden, USAF, Family Nurse Practitioner DNP graduate student: “This year’s Bushmaster was exceptional. It highlighted USU’s capacity to think outside of the box and develop a capstone event that not only challenged, but showcased the abilities of each and every participant. This is very important, because all of the operational knowledge amassed over the four years of medical school, and the two years of graduate nursing education plus previous military service experience, is evaluated during Bushmaster. Although the pandemic posed a serious threat, the university made great strides through careful planning, determination, and a commitment to education; thus, leading to a successful event. Student excellence was also on full display, as evidenced by their outstanding performances. In spite of upcoming graduations and PCSing (Permanent Change of Station), the participants were determined to do their absolute best. I was told by several GSN students that this was some of the best training that they have received in the military. Finally, it allowed the school of medicine and school of nursing to show the vitalness of interprofessional teamwork and mutual respect in military medical operations.”

The Grand Challenges

The National Academies of Sciences, Engineering and Medicine (NASEM) recently concluded its closing session of the Workshop Series on “Lessons Learned in Health Professions Education (HPE) during the COVID-19 Pandemic,” chaired by Zohray Talib. The pandemic highlighted the critical extent of our nation’s Health Disparities, with vulnerable populations being more susceptible than previously realized. And, it raised a number of thought-provoking questions.

How, for example, do we prepare for the next crisis in health professions education, when we don’t know what that crisis will be? How do we address long standing challenges in HPE that reached a tipping point during the pandemic? Are students and trainees really part of the health system or observers of the health system? Is a competency-based model needed? What is the role of interprofessional and cross-sector collaboration? Is there room in the curriculum to address health promotion and active community involvement? How can meaningful communication and trust be improved among leadership, faculty, students, and the community? How should stress and burnout among faculty and students be addressed? What will be future clinical training opportunities and will they be financially viable?

Virtual platforms for learning and collaboration represent a growing opportunity, especially for incorporating social determinants into HPE. In her concluding remarks, former USPHS Principal Deputy Assistant Secretary for Health Sylvia Trent-Adams highlighted the importance of developing culturally sensitive health care role models for the next generation even prior to high school, in preschool and kindergarten. “Millions of stars up in the sky.... Oh, Hokule’a, Star of Gladness” (Israel Kamakawiwo’ole).

Aloha,

Pat DeLeon, former APA President

AN ALTERNATIVE MODEL FOR THE PATHOPHYSIOLOGY OF SCHIZOPHRENIA

Alan Dubro, Ph.D.

A psychopharmacological study looking at the efficacy of a new drug for Schizophrenia was published in the New England Journal of Medicine on February 25th 2021¹. Co-investigator Jeffrey A. Lieberman, MD, professor and chairman in the Department of Psychiatry, Columbia University College of Physicians and Surgeons, told Medscape Medical News, “if approved, the new agent will be a “game changer” in the treatment of Schizophrenia”.

The current armamentarium of antipsychotic drugs is associated with adverse events such as extrapyramidal symptoms, sedation, weight gain, metabolic disturbances, and hyperprolactinemia that contribute to poor medication adherence and relapses of psychosis.² Moreover, 20 to 33% of patients do not have a response to anti-psychotic drugs, and others have residual psychotic symptoms.³ Many patients with schizophrenia have poor functional status and quality of life despite lifelong treatment with current antipsychotic agents.⁴

The discovery of neuroleptic drugs in 1952 provided a new strategy for seeking a biological basis of schizophrenia⁵. This entailed a search for a primary site of neuroleptic action. The Parkinsonian effects caused by neuroleptics suggested that dopamine transmission may be disrupted by these drugs. In 1963 it was proposed that neuroleptics blocked the release of dopamine metabolites. Systematic research was made between 1963 and 1974 for a primary site of neuroleptic action. Direct evidence that neuroleptics selectively blocked dopamine receptors in the brain occurred in 1974 with the finding that dopamine pathways may be overactive in schizophrenia.⁵

Conventional antipsychotics (termed typical or first-generation antipsychotics [FGAs] (i.e., haloperidol, chlorpromazine)), act on the dopaminergic system by blocking the dopamine type 2 (D2) receptors. While these antipsychotics may be effective against the positive symptoms of Schizophrenia (disorganized thought processes, hallucinations, delusion), they have been considered to be ineffective in treating negative symptoms (apathy, lethargy, social withdrawal, anhedonia, impaired attention, flat affect).⁶

The search for antipsychotic medications to manage both the positive and negative symptoms of Schizophrenia led to clozapine in the early 1990s and signaled a new generation of antipsychotic drugs (termed “atypical” or second-generation antipsychotics [SGAs]). A series of SGA compounds have been developed (i.e., risperidone, olanzapine, quetiapine).⁷

Although SGAs were developed to improve on the shortcomings of FGAs, they also have significant limitations in terms of side effects. As a class, they have a more favorable profile in terms of extrapyramidal side effects and tardive dyskinesia, but produce other side effects, including sedation, hypotension, weight gain, and sexual dysfunction.⁸ Although issues regarding medication compliance was hoped for with SGAs this has not been the case given their association with new adverse side effects.

I received my doctorate in Clinical Psychology in 1986. I have been licensed since 1988. Over the past 30 years many of the clients whom I have treated have been treated with both first and second generation anti-psychotic medication. Compliance has been an ongoing issue, adverse side effects typically lead to poor compliance, and both first and second generation anti-psychotic medication have side effects. None has been the “magic bullet” for the treatment of Schizophrenia. To learn about clinical psychopharmacology, I entered and completed a master’s degree program in the field. I passed the Psychopharmacology Exam for Psychologists (PEP) which allows me to prescribe psychiatric medication in several states (hopefully, Ohio will soon be added to the list). The dopamine theory continues to be the pharmacology model for Schizophrenia. Did this mean that since the introduction of chlorpromazine in the 1950’s no other models emerged?

Several lines of evidence suggest an involvement of a cholinergic dysfunction in the pathology of cognitive impairments in schizophrenia, as well as in positive and negative symptoms.⁹ Xanomeline is an oral muscarinic cholinergic receptor agonist that is devoid of direct effects on dopamine receptors and that preferentially stimulates M1 and M4 muscarinic cholinergic receptors. However, there are dose-dependent cholinergic adverse events of nausea, vomiting, diarrhea, sweating, and hypersalivation mediated by stimulation of peripheral muscarinic cholinergic receptors. Tropicium muscarinic receptor antagonist that is approved for the treatment of overactive bladder in the United States and in Europe.

In a phase 1 trial involving healthy volunteers, the incidence of cholinergic adverse events was approximately 50% lower when tropicium was added to xanomeline than when xanomeline alone was used¹⁰. In a phase 2 study a combination of the muscarinic receptor agonist xanomeline and the anticholinergic agent tropicium resulted in greater reductions than placebo in the degree of positive, negative, and cognitive symptoms in adult schizophrenic patients. Treatment with xanomeline–tropicium resulted in cholinergic and anticholinergic adverse events but was not associated with a higher incidence of extrapyramidal symptoms or weight gain than placebo.¹⁰

To summarize, the cholinergic-muscarinic hypothesis should be seen as an addition to existing theories of schizophrenia and offers a potential new approach for the psychopharmacological treatment of schizophrenia.

“I’VE BEEN A PUPPET, A PAUPER, A PIRATE, A POET, A PAWN AND A KING”

Pat DeLeon, Ph.D., MPH, JD (former APA President)

An Inconvenient Truth

Like many visionaries, Vice President Al Gore may have been ahead of the times; however, there can be little question that the health effects of climate change must become a major consideration for all health professions in the immediate future. Founded in 1970 as the Institute of Medicine (IOM), the National Academy of Medicine (NAM) is one of three academies that constitute the National Academies of Sciences, Engineering, and Medicine. Its mission is to improve health for all by advancing science, accelerating health equity; and providing independent, authoritative, and trusted advice nationally and globally. Its vision is a healthier future for everyone.

In 2013, the IOM Discussion Paper Health in All Policies: Improving Health Through Intersectoral Collaboration opined: “The greatest health challenges for the nation today are complex, inextricably linked, and have no easy solutions, such as chronic illness, obesity, health inequities, rising health costs, an aging population, and growing inequity. At the same time, urgent environmental problems such as climate change, water shortages, and the loss of habitat and other natural resources threaten to exacerbate existing health problems and create new health challenges. Medical services, while vitally important, play a lesser role in overall population health improvement than the social determinates of health – the environments in which people live, work, learn, and play....

“Climate change and other global environmental challenges have direct impacts on health, for example, through extreme heat events, and also threaten the life-supporting systems on which human beings depend. The direct and indirect health effects of climate change, such as declining access to clean water, air pollution, crop loss, stratospheric ozone depletion, sea level rise and collapse of fisheries all suggest that ‘environmental sustainability must itself be a key health goal, particularly because all forms of ecosystem collapse will have grave impacts on health equity, with greater impacts on the most vulnerable communities.’”

Last fall, after the conclusion of NAM’s first fully virtual annual meeting, President Victor Dzau highlighted the potential effects of climate change as a major existential threat to society and announced that Climate Change and Human Health were to be an NAM Grand Challenge. Since then, NAM has been working diligently with leaders from the federal government, industry, hospital systems, private payers, academia, and non-profits to identify a shared vision and collaborative pathway toward decarbonization of the U.S. health care sector. NAM has partnered with the Burroughs Wellcome Fund to provide “opportunity grants” to interdisciplinary teams to explore promising ideas at the intersection of climate change and human health. Further, the mental health impacts on vulnerable populations due to climate change-induced displacement, as well as systematically exploring the impact of climate change on children’s health and development have become express identified concerns.

The Continuing and Steady Evolution of PCSAS

Alan Kraut has been a tireless supporter of the Psychological Clinical Science Accreditation System (PCSAS) since its inception, first at the Association for Psychological Science (APS) and now as PCSAS Executive Director. Alan's aim has been to ensure that our nation's educational policy leaders, at both the national and state level, appreciate PCSAS's potential contributions. At an early stage of his policy career, Alan was instrumental in hosting APA's first Congressional Black Tie dinner event for then-U.S. Senator Daniel K. Inouye.

Currently, eight states formally recognize PCSAS accredited graduates for licensing. And, with the recent recognition by the State of Arizona this spring, more than 30 percent of the nation's population now live in states that recognize PCSAS. Two of Alan's colleagues who were the forces behind the recent change in Arizona's licensing law, the University of Arizona's David Sbarra and Arizona State University's William Corbin recently wrote "Eight Lessons for Working with Legislators" in the APS Observer. A summary: Lesson #1 – If you can't get access to your legislative affairs colleagues, or your issue can't get 'elevated' enough to be on their radars, find a local influencer who can make this happen. Lesson # 2 – Once you're formally pursuing legislative parity, keep your messages as simple as possible. Lesson #3 – Identify and engage your stakeholders. Lesson #4 – It only takes one vocal opponent to derail the process. Lesson # 5 – Perseverance is key. Lesson # 6 – Work with your lobbyists to understand the legislative strategy. Lesson # 7 – Have a theory of the case. And, Lesson # 8 – Connect to something larger than your local pursuits." To these, we would only add: Believe in your mission and Personal stories are remembered far longer than impersonal facts.

At the national level, PCSAS has been recognized by the U.S. Department of Veterans Affairs, by the Association of Psychology Postdoctoral and Internship Centers (APPIC), and by many of the membership organizations that represent clinical psychology, including APA Division 12's Section 3, the Society for a Science of Clinical Psychology. Last year the U.S. Congressional Appropriations Committee encouraged the Health Resources and Services Administration (HRSA) to update their eligibility requirements for the Behavioral Health Workforce Education and Training program and the Graduate Psychology Education program to "account for accreditation changes that have occurred since the eligibility requirements were established... to ensure that HRSA's health workforce programs continue to have access to the best qualified applicants, including those who graduate from PCSAS programs."

Alan and PCSAS Board President Robert Levenson of the University of California-Berkeley were just informed that beginning in Fiscal Year 2022, PCSAS programs would be deemed eligible to apply. A key factor in their success was the impressive and detailed responses by a number of students demonstrating they already were serving communities of concern to HRSA. Examples cited include: working with homeless Veterans and other individuals who are either currently incarcerated or recently released from prison; working in a community clinic where most clients are diverse in race, ethnicity, sexual and gender orientation, and SES; and working with rural and low-income families, as well as with immigrant families directly in school settings who would not otherwise have access to services. Our personal congratulations to Alan and his colleagues for providing our nation's educational institutions with viable options for demonstrating educational competence.

Prescriptive Authority (RxP) Addressing Society's Pressing Needs

Beth Rom-Rymer: "Several of our psychologists, who are training to become prescribing psychologists, are working in hospitals that serve patients who are traditionally underserved in mental health. Derek Phillips, an Early Career Neuropsychologist and President-Elect designate of the Illinois Psychological Association,

has a full-time position, and is also training to become a prescribing psychologist at Sarah Bush Lincoln Health System, serving 10 quite small, rural, east central Illinois counties. He has told me that Medicaid is his third most frequent payor and represents the payor source for 20% of his patients. At the same time, his most frequent payor source is Medicare. AMITA Health System, the largest healthcare system in Illinois and the largest Medicaid provider of mental health services in Illinois, is also the health system that trains the vast majority of our prescribing psychologist Fellows in Illinois. We are very proud that our Prescriptive Authority Movement in Illinois is making good on its commitment to provide greater access to those in our communities who have been suffering too much and too long because of the inaccessibility of mental health care! I know that all of our graduate students and our undergraduate students, who are already studying, in the early stages of their careers, to become prescribing psychologists, are thrilled with the prospect of being a part of a new cadre of prescribing psychologists who are helping to meet the needs of the underserved and are providing relief to our health system that has been in a deep crisis for decades.” As both Alan and Beth have indicated, the voices and actions of the next generation can make a substantial and highly positive difference.

The Long-Term Importance of PSYPACT

Alex Siegel, Director of Professional Affairs, Association of State and Provincial Psychology Boards: “In the last three years the professional practice of psychology has made a significant shift towards telepsychology. Prior to COVID-19, most psychologists did not know about telepsychology, much less use it, to provide psychological services to patients. As all of us are aware, during COVID most of us pivoted to telepsychology as the way to treat/assess patients. Now as the pandemic subsides and the states’ Executive Orders allowing interjurisdictional practice ends, the Psychology Interjurisdictional Compact (PSYPACT) will become increasingly important to our ability to provide psychological services to patients across jurisdictional boundaries in the United States.

“PSYPACT is an interstate compact for the professional practice of psychology. It was designed to provide psychologists with a legal and ethical pathway to conduct telepsychology and/or practice in-person, face-to-face psychological services across state boundaries without necessitating the need to become licensed in every state they intend to practice. In the future, PSYPACT will continue to administer an accessible and manageable regulatory structure for the practice of telepsychology and temporary in-person practice.

“Over the last two years, we have made significant gains in the number of jurisdictions which have enacted the legislation. There are now 25 jurisdictions with several additional states with active legislation. In those jurisdictions, for the most part, state psychological associations have been big advocates for PSYPACT. Their membership see this as increasing their ability to provide telepsychological services to patients who might move to, or live in, another state. In addition, patients welcome the benefits of increased access to care, continuity of care, and a greater degree of public protection.” “I just pick myself up and get back in the race. That’s life” (Frank Sinatra).

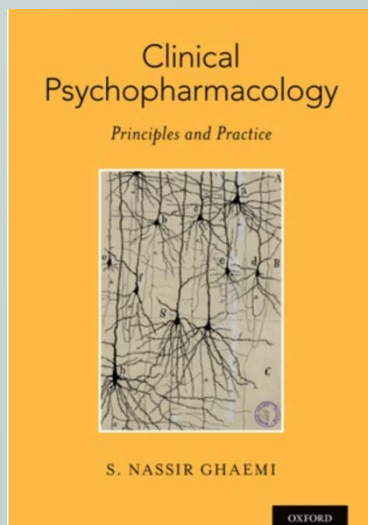
Aloha,

Pat DeLeon, former APA President

BOOK REVIEW:

CLINICAL PSYCHOPHARMACOLOGY: PRINCIPLES AND PRACTICE (1ST EDITION)

Amir A. Sepehry, M.Sc., Ph.D., Section Chair
Adler University (Vancouver)



Clinical Psychopharmacology: Principles and Practice

1st edition, 2019

By: S. Nassir Ghaemi

ISBN-13: 978-0199995486, 580 pages (paperback)

Publisher: Oxford University Press (New York)

Nassir Ghaemi's *Clinical Psychopharmacology: Principles and Practice*, is an extraordinary amalgam of knowledge, published by the Oxford University Press. It consists of 6 sections with appendices and 49 chapters, for a total of 580 pages. This impressive comprehensive body of knowledge covers aspects related to basic psychopharmacology (e.g., nomenclature, neurobiology, and mechanism of action), research concepts (e.g., limitation of clinical experience, evidence-based medicine, maintenance treatment, negative results of trials, side-effects and generalizability), common and novel drug classes and classifications (e.g., antidepressants, antipsychotics (AKA: dopamine blockers), anxiolytic, antihistamines, melatonin agonists, mood stabilizers), treatment of disease and syndromes (e.g., schizophrenia and schizoaffective, addictions, posttraumatic stress), special topics such as carcinogenicity, seasonal affective illness, suicide, children, older adults, women, ethnic and racial/cultural groups, polypharmacy, medical illnesses, industry, and future directions. The book ends with section 6 where the art of psychopharmacology is discussed from various perspectives, such as placebo effect, diagnostic interview, clinical cases, and legal implications, and list of Appendices covering diagnostic controversies.

This splendid seminal work, among many topics, informs on why the term Serotonin Selective Reuptake Inhibitor (SSRI) is no longer/or minimally used. Now a day, clinicians, and researchers in the field of psychopharmacology are straying from the well-known acronym SSRI to SRI, since it is understood that monoaminic system in the brain is interrelated. Thence by this virtue they are referring to monoamine serotonin antagonist agents (i.e., citalopram, escitalopram, paroxetine, venlafaxine, fluoxetine, trazodone, vilazodone).

Another interesting topic discussed in this book is the utilization of non-prescription substances, such as melatonin (hormone) agonists and antihistamines for the treatment of anxiety/sedation, depressive symptoms, and sleep-related conditions. In an era where we are turning to reformulating or re-purposing various compounds, this seems to be the next step.

What is unique to this book, that I have noticed, is the broad coverage of the chapter called Curbside consults, consisting of questions and answers. This chapter covers questions such as, do benzodiazepine increases the risk of dementia? what about extended-release formulations of drugs, are the same as the original formulation? How neuroprotective is lithium? And similar questions related to the effect of marijuana.

I find this book valuable to graduate-level students of clinical psychology, but also to students attending graduate school in various psychology programs, as it discusses the emergent data from clinical trials (e.g., CATIE, CUtLASS, STAR*D). Given the swift review of gross neuroanatomy and neurobiology of mental illness and the implication of psychopharmacology at onset, I also find this book useful to students of neuropsychology and those looking for brevity while studying the relation between brain and behavior. Would I recommend this book to clinical counsellors too, of course! As a final note, I can say that this work can be a helpful tool to successful psychology, be it as a student, teacher, or researcher, since it coherently provides knowledge that one needs for clinical work.

For a list of additional psychopharmacology textbooks of note, please see Appendix B of the present newsletter.

APPENDIX A: CPA Psychopharmacology Section Statement

Section Executive Committee

December 3, 2021

The Executive Committee of the Psychopharmacology Section (hereinafter “the Section”) of the Canadian Psychological Association (CPA), submits the following as an official Section recommendation regarding the proposed 6th Revision of the Accreditation Standards for Doctoral and Residency Programs in Professional Psychology.

The Section considers it essential for all graduate students in professional psychology to attain a basic knowledge of clinical psychopharmacology. This refers to the branch of clinical psychology involving the scientific study and evidence-based application of psychotropic medications and pharmacological principles (i.e., pharmacokinetic and pharmacodynamic) for treatment of complex mental disorders and promotion of patients’ well-being. Students must achieve and maintain professional competence in this subject for purposes of direct patient care, collaborative and integrative treatment and consultation, and avoiding professional “silos.”

The Recommendation

Accordingly:

The Section recommends that a minimum of 3 credits in clinical psychopharmacology be required as a condition of accreditation for all graduate doctoral programs in professional psychology. The term “clinical psychopharmacology” is meant to include psychotropic prescription medications and other psychoactive substances (recreational and abusable) that patients may take.

This course work would supplement, and not replace, course work in the fundamental biological basis of behavior (including, but not limited to, neuropsychology, brain and behavior relationships). As students in training to become health care providers, they will inevitably work with patients who take, might benefit from a referral for conjoint pharmacological treatment, or may wish to stop a medication protocol.

Rationale:

Canadian Psychological Association

The Canadian Psychological Association has already recommended this for inclusion in the revised Standards. The Canadian Psychological Association Task Force on Prescriptive Authority for Psychologists in Canada (2010) recognized clinical psychopharmacology as a necessary training domain in their final report to the Association:

As noted previously, the CPA Prescriptive Authority Task Force found the initial three level

continuum of psychopharmacological training conceptualized by the APA Ad Hoc Task Force on Psychopharmacology (Smyer et al, 1993) useful in organizing its consideration of this complex issue. There was a general Task Force consensus that in order to meet current and future practice expectations, predoctoral training within graduate programs and internships need to provide basic psychopharmacological information (Level 1) and experience in active collaborative practice with prescribing professions (Level 2) (pp. 25-26).

and:

Basic psychopharmacological training should be specified more distinctly within accreditation requirements. Current accreditation standards are defined by general content areas (biological, social, cognitive, etc.), emphasizing breadth of training. The problem of this approach is illustrated by the issue of psychopharmacological knowledge. Psychopharmacological preparation is not currently a specific requirement. It is mentioned as an option under a required “biological” core area: Biological bases of behavior (e.g., physiological psychology, comparative psychology, neuropsychology, psychopharmacology) (CPA, 2002). It is entirely possible within these standards for a doctoral student in a professional program to graduate without formal psychopharmacological training. While this is not normally the case, this potential is viewed as professionally unacceptable (p. 26).

Ethical Issues

That professional psychologists must have and maintain some working knowledge of clinical psychopharmacology is also an ethical issue, as implied in the 4th edition of the CPA’s code of ethics (2017):

Principle II: Responsible Caring. This principle generally should be given the second highest weight. Responsible caring requires competence, maximization of benefit, and minimization of harm, and should be carried out only in ways that respect the dignity of persons and peoples (p. 6).

Preparing Students for Licensure and Independent Practice

Most provinces and territories require applicants for license to take the Examination for Professional Practice in Psychology (CPA, n.d.). The biological basis of behavior is a subject matter domain in this examination (Association of State and Provincial Psychology Boards, n.d.), and may include questions on psychotropic medications.

The use of psychotropic medication is on the increase in the developed world, including Canada (Brauer, Alfageh, & Blais, et al., 2021). Patients may present with complex mental health histories. In addition to psychotropic medications, they may have histories of substance abuse (which may be ongoing), and/or engage in the recreational use of psychoactive substances, such as marijuana or CBD. Notably, psychedelics (e.g., Methylenedioxymethamphetamine: MDMA) are now a subject of research focus (Mithoefer, Feduccia, & Jerome, et al. (2019), and as such are the proper concern of professional psychologists involved in clinical research as well as treatment.

Patients may be appropriate for combined psychological and pharmacological interventions (Sammons & Schmidt, 2001), which, for non-prescribing psychologists, necessarily involves

collaboration with prescribing health care providers.

Summary:

In summary, we propose that training in clinical psychopharmacology be included in the 6th revision of the Accreditation Standards as a specific criterion for accreditation.

Thank you for your attention to our recommendation. Please do not hesitate to contact me if you have any questions or concerns about this document.

Respectfully submitted to the Accreditation Panel on (December 3rd, 2021):

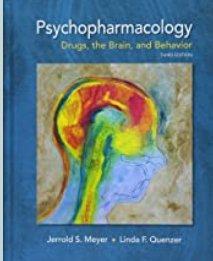
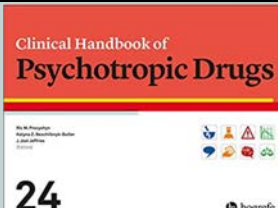
Amir Sepehry, Ph.D.
Chair, Psychopharmacology Section
Canadian Psychological Association

APPENDIX B: SELECTED PSYCHOPHARMACOLOGY TEXTBOOKS

Amir A. Sepehry, M.Sc., Ph.D., Section Chair
Adler University (Vancouver)

	<p>Clinical Psychopharmacology: Principles and Practice By: S. Nassir Ghaemi Year: 2019 Publisher: OXFORD</p>
	<p>Schatzberg's Manual of Clinical Psychopharmacology By: Alan F. Schatzberg and Charles DeBattista Year: 2019 Publisher: Amer Psychiatric Pub Inc</p>
	<p>Handbook of Clinical Psychopharmacology for Therapists By: John D. Preston Year: 2021 Publisher: New Harbinger Publications</p>

 <p>Clinical Manual of Geriatric Psychopharmacology</p> <p>Sandra A. Jacobson, M.D. Ronald W. Pies, M.D. Ira R. Katz, M.D., Ph.D.</p>	<p>Clinical Manual of Geriatric Psychopharmacology By: Sandra A Jacobson Year: 2014 Publisher: American Psychiatric Publishing</p>
 <p>Activate your eBook</p> <p>GREEN'S Child & Adolescent Clinical Psychopharmacology</p> <p>SIXTH EDITION</p> <p>Rick T. Bowers Christy D. Weston Ruar C. Watt Sara C. Hanson Julia C. Jackson</p>	<p>Green's Child and Adolescent Clinical Psychopharmacology By: Rick Bowers, Julia Jackson, et al. Year: 2018 Publisher: LWW</p>
 <p>HANDBOOK OF Clinical Psychopharmacology for Psychologists</p> <p>Edited by Mark Muse Bret A. Moore</p> <p>CD-ROM includes a practice test based on the 400 PPT items</p>	<p>Handbook of Clinical Psychopharmacology for Psychologists By: <u>Mark Muse</u> and <u>Bret A. Moore</u> Year: 2012 Publisher: Wiley</p>
 <p>5th Anniversary Stephen M. Stahl Fifth Edition</p> <p>Stahl's Essential Psychopharmacology Neuroscientific Basis and Practical Applications</p> <p>OXFORD Medicine</p>	<p>Stahl's Essential Psychopharmacology: Neuroscientific Basis and Practical Applications By: <u>Stephen M. Stahl</u> Year: 2021 Publisher: OXFORD</p>

	<p>Prescriber's Guide: Stahl's Essential Psychopharmacology By: <u>Stephen M. Stahl</u> Year: 2018 Publisher: OXFORD</p>
	<p>Psychopharmacology: Drugs, the Brain, and Behavior By: Jerrold S. Meyer and Linda F. Quenzer Year: 2018 Publisher: Sinauer Associates is an imprint of Oxford University Press</p>
	<p>Julien's Primer of Drug Action By: Claire D. Advokat Year: 2018 Publisher: MacMillan learning</p>
	<p>Clinical Handbook of Psychotropic Drugs By: Procyshyn, Ric M. Year: 2021 Publisher: Hogrefe Publishing</p>

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AN ALTERNATIVE MODEL FOR THE PATHOPHYSIOLOGY OF SCHIZOPHRENIA

Alan Dubro, Ph.D.

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