



Training in Substance use Disorders, Part 1: Overview of Clinical Practice Recommendations

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Introduction

Substance use disorders (SUDs)² are common in the Canadian population and psychiatric practice. The consequences of SUDs include a wide range of social problems, including child abuse and neglect, domestic violence, crime, unemployment, suicide, accidents, lost productivity and family dysfunction. SUDs majorly contribute to potentially preventable medical and

psychiatric illnesses and premature death. The estimated cost to Canadian society is at least \$46 billion annually.³ Recent changes in Canada concerning addictive substances, including the legalization of cannabis, the opioid epidemic and the rise of methamphetamine and fentanyl use, are not included in these figures and are only further amplifying the impact. The lifetime prevalence for a SUD is 11–14 per cent and 0.4–1.1 per cent for gambling disorder.^{4–7} Like many psychiatric disorders,

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SUDs have a peak onset in young adulthood (ages 15–25), with improved outcomes with early intervention.⁸

SUDs may predispose a person to a psychiatric disorder, induce symptoms or be used to self-treat psychiatric symptoms. Between one-quarter and one-half of all patients seeking treatment for a psychiatric disorder also meet the criteria for a concurrent lifetime SUD.^{9–12} Among those patients seeking addiction treatment, 40 to 60 per cent have an independent (non-substance-induced) mood disorder.¹¹ The co-occurrence of both psychiatric disorders and SUDs is common and makes each more difficult to treat.¹³

In Canada, mental health and addiction treatment services have historically been separated, with psychiatric care provided by physicians in the Canadian health-care system and care of patients with addictions occurring in non-medical facilities in the community. As a result, services developed independently with different philosophies about recovery. Treatment then occurred in parallel, with often little communication between treatment providers, potentially resulting in mixed messages to the patient, or sequentially without ongoing care of substance use or psychiatric disorder, depending in which treatment they were currently enrolled. People suffering from a serious and persistent psychiatric disorder with a co-occurring SUD tend to respond less well to traditional abstinence-focused addiction services¹⁴ and are often excluded from psychiatric treatment programs. These complex patients do better in integrated treatment programs, where the same team of professionals provides the treatment for both psychiatric and SUD problems. More than 50 controlled studies have established the importance of integrating the treatment of patients with co-occurring disorders, eliminating the problems encountered in separate care systems for these individuals.¹⁵ Canadian clinical guidelines recommend that all people seeking help from mental health treatment services be screened for co-occurring SUD.¹⁶ Health Canada Best Practices¹⁷ also recommends an integrated treatment approach at the program level for people with concurrent disorders.

Clinical guidelines have been published for treating SUD by several organizations, including the American Psychiatric Association,¹⁸ the World Federation of Societies of Biological Psychiatry^{19,20} and the Canadian Medical Association.²¹ There are also lower-risk cannabis use guidelines that outline the current state of evidence on reducing health harms from non-medical cannabis use.²²

The 2007 Royal College of Physicians and Surgeons of Canada (RCPSC) Specialty Training Requirements in Psychiatry and Objectives of Training (OTR),²³ and the first

published CPA curriculum guidelines²⁴ in 1997 were updated by a working group in 2015.^{1,25} However, Canadian psychiatry training programs are transitioning from a traditional time-based training model to competence by design.^{26–28} Promotion throughout residency is now linked to residents completing entrustable professional activities (EPAs). As a result, training programs are being revised to ensure residents obtain the required new psychiatry competencies²² and training experiences.²⁷ Supervising psychiatrists will need to be able to evaluate EPAs on SUD and provide feedback/coaching to residents.

In addition to changes in the OTR in psychiatry, there are new developments in treating SUD and the approaches to managing patients with concurrent disorders that practicing psychiatrists need to know. Since many psychiatrists received minimal training in addictions during residency, it can be difficult to upgrade when foundational knowledge is rudimentary. Whether supervising a resident or not, all practicing psychiatrists need specific knowledge, skills and attitudes to manage patients with SUDs in their clinical practice.

Changes in clinical practice and training requirements necessitate updating the 2015 CPA position papers. Part 1 of this position paper describes the knowledge, skills and attitudes of current practicing psychiatrists necessary to competently assess and manage persons with SUD in their psychiatric practice, with the ultimate aim to improve outcomes for persons with SUD as well as improve supervision.

A Review of Key Clinical Concepts in Addiction Psychiatry

Attitudinal Skills

People suffering from a SUD often experience stigma when seeking medical, psychiatric or addiction care, which is associated with poor outcomes.²⁹ SUDs are often chronic relapsing and remitting disorders and are not merely a choice or a purely psychosocial problem. SUDs have a biopsychosocial basis with shared etiologies with psychiatric disorders, including genetic heritability, neurobiology and psychosocial factors.^{30–34}

Clinicians need to assess a person with a SUD in a supportive, non-judgmental manner. Although patients with SUD may be most often seen in acute care settings, they present in all clinical settings. It is important to recognize that changes in SUD behaviour take time and require specific management. Like many psychiatric disorders, relapses and remissions occur, requiring ongoing treatment engagement and management. An

awareness of a patient's history of trauma, adverse childhood experiences, cultural factors, current stresses and coping skills is essential in understanding their SUD and developing a therapeutic alliance.

Psychiatrists need an awareness of their reactions and potential biases towards patients with SUD and concurrent psychiatric disorders. It is essential to maintain empathy and optimism for change and improvement over time. Patients with SUDs may be ambivalent in their desire to change their SUD behaviour, which is often a normal human response to behaviour change. This can be frustrating for the clinician. Familiarity with Prochaska and Di Clemente's stages of change³⁵ can help clinicians determine a patient's readiness to change, tailor interventions appropriately and sometimes help give perspective to why a patient may not change despite seemingly clear reasons to change. Psychotherapeutic interventions that are collaborative and honour client autonomy to explore ambivalence and lead patients towards a commitment to change behaviours, such as motivational interviewing (MI), enable clinicians to maintain optimism in working with patients with SUDs.^{36,37}

All communication should be patient-centred, fostering patient trust and autonomy, and characterized by empathy, respect and compassion. Psychiatrists must advocate for interventions that support recovery, including harm reduction and access to evidence-based treatments.

Screening, Assessment and Diagnosis

The diagnosis of a SUD is based on data collected during the clinical interview with the patient, physical examination, laboratory investigation and collateral information. Screening for SUDs should be done routinely for all psychiatric patients and all patients with SUDs should be screened for psychiatric disorders.¹⁶ Screening identifies patients who require a comprehensive assessment involving gathering more detailed information to determine SUD diagnoses and develop an individualized treatment plan.³⁸

Screening, Brief Intervention and Referral to Treatment (SBIRT) is "a comprehensive and integrated approach to delivering early intervention and treatment services through universal screening for persons with SUD and those at risk."³⁹ It has been used successfully in multiple settings, including mental health settings,⁴⁰ and can be implemented by clinicians with minimal addiction training and is evidence-based.³⁹ Screening typically involves validated instruments (see below). Those at risk for SUD or with mild to moderate SUD may benefit from a brief (5–10 min) intervention based on MI principles, often using the Feedback, Responsibility, Advice, Menu of options, Empathy and Self-Efficacy (FRAMES)

model.⁴¹ Those with more severe or extensive SUDs are offered referral to SUD treatment.⁴²

Asking patients about their substance use with direct and non-judgmental questions is recommended to ensure candid and reliable disclosure. Clinicians should screen for alcohol, cannabis, opioids, sedative-hypnotics, stimulants and other substances (both illicit and licit), including tobacco and e-cigarette use, prescription drugs, over-the-counter medications and behavioural addictions. To augment screening, empirically validated screening tools for SUD, such as the Alcohol Use Disorders Identification Test (AUDIT),⁴³ the Drug Abuse Screening Test (DAST),⁴⁴ and the Cannabis Use Disorder Identification Test-Revised (CUDIT-R)⁴⁵ can be administered by a clinician or with a self-report questionnaire. When eliciting the substance use history, it is essential to determine the patient's readiness to change their substance use and provide appropriate interventions.³⁶

Psychiatrists, especially those working in acute care settings, should be able to recognize signs and symptoms of substance intoxication and withdrawal. Evidence of these should prompt a more in-depth assessment of the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision SUD criteria when the patient can participate (see Table 1). In addition, psychiatrists should be able to interpret laboratory investigations pertinent to substance use, such as liver function tests and urine drug metabolite tests.⁴⁶

Assessment skills to distinguish substance-induced psychiatric disorders from primary psychiatric disorders are essential for psychiatrists. Clinicians should be able to elicit a comprehensive history of both psychiatric symptoms and substance use to identify if a psychiatric disorder predated the substance use, persisted during periods of abstinence, or if symptoms are unrelated to periods of substance use, to determine if a co-occurring primary psychiatric condition is present. The differences between primary schizophrenia and substance-induced psychoses can illustrate how to differentiate substance-induced disorders from underlying primary psychiatric disorders (Table 2). Similarly, while major depressive disorder (MDD) and alcohol use disorder (AUD) are prevalent in the Canadian population and significant contributors to disability and decreased quality of life,⁴⁷ accurate diagnosis and treatment of concurrent MDD and AUD remain challenging.⁴⁸ Published clinical recommendations guide differential diagnosis, pharmacotherapy, psychotherapy and care integration into clinical practice.⁴⁸

Other factors can help differentiate substance-induced psychiatric symptoms from primary psychiatric disorders. If there are only some symptoms rather than the full criteria, then a substance-induced etiology may be more likely. Classic symptoms such as melancholia and psychomotor slowing would point towards the presence of a primary depressive disorder.⁴⁸ But even with a keen acumen, in 35 to 40 per cent of cases, it may be impossible to determine if a mood disorder is primary or substance-induced.⁴⁹ Treatment of both conditions simultaneously is recommended, thus diminishing the need for differentiation.^{50–52}

Depending on the setting, psychiatrists assessing patients with a SUD should screen for all major psychiatric disorders when indicated.^{50–52} Co-morbid psychiatric disorders generally have greater severity of symptoms, are more resistant to treatment and have an increased relapse rate.⁵³ Areas to assess include mood,⁴⁷ anxiety,¹¹ psychotic,^{54,55} trauma and stressor-related,⁵⁶ personality,⁵⁷ eating⁵⁸ and attention deficit hyperactivity disorders.⁵⁹

Men use substances more often than women, making them more likely to have substance-induced psychiatric

symptoms.^{60–62} Women using substances are more prone to an accelerated progression, or telescoping, to the development of SUD and admission to treatment^{33,61,63} with higher rates of comorbid primary psychiatric disorders, especially mood, anxiety and eating disorders.^{9,64} Treatment-seeking women with SUD report high rates of physical and sexual abuse, domestic violence and re-victimization.³³ Thus, it is essential to assess intimate partner violence.^{65–67} Psychiatric assessment of a pregnant person must include a review of substance use due to the potential adverse consequences for the fetus, with patients offered urgent and assertive harm reduction interventions to minimize risk.^{38,68–70}

The clinical assessment of persons with SUD also requires screening for non-suicidal self-injurious behaviour, suicidal behaviour and potential for violence/aggression, given the well-known associations with substance use.^{71–73} In addition, many persons with SUD use substances to cope with environmental stresses, psychiatric symptoms (such as posttraumatic stress disorder [PTSD] symptoms) and

Table 1. Substance use disorder criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision.²

A. A problematic pattern of substance use leading to clinically significant impairment or distress as manifested by at least two of the following, occurring within 12 months:

1. The substance is often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful efforts to reduce or control substance use.
3. A lot of time is spent in activities necessary to obtain the substance, use it or recover from its effects.
4. Craving, or a strong desire or urge to use the substance.
5. Recurrent substance use results in a failure to fulfill major role obligations at work, school or home.
6. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance.
7. Important social, occupational or recreational activities are given up or reduced because of substance use.
8. Recurrent substance use in situations in which it is physically hazardous.
9. Substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused by or exacerbated by the substance.
10. Tolerance, as defined by the following:
 - a. A need for markedly increased amounts of the substance to achieve intoxication or desired effect.
 - b. A markedly diminished effect with continued use of the same amount of the substance.
11. Withdrawal, as manifested by either of the following:
 - a. The characteristic withdrawal syndrome for the substance.
 - b. The substance (or a closely related substance) is taken to relieve or avoid withdrawal symptoms.

Specify:

A. Severity:

- Mild: Presence of 2–3 criteria.
- Moderate: Presence of 4–5 criteria.
- Severe: Presence of 6 or more criteria.

B. Remission Status:

In Early Remission: After criteria have been met for a substance use disorder, none of the criteria have been met for at least 3 months but for less than 12 months (with the exception that criterion A4, “Craving, or a strong desire or urge to use the substance,” may be met).

In Sustained Remission: After criteria have been met for a substance use disorder, none of the criteria have been met at any time during 12 months or longer (with the exception that criterion A4, “Craving, or a strong desire or urge to use the substance,” may be met).

C. In a Controlled Environment: This additional specifier is used if the individual is in an environment where access to the substance is restricted.

emotional dysregulation,^{74–76} all of which should be explored during the assessment.

It is essential to identify all SUDs with a qualifier to indicate the severity or remission of the substance use, past or present, as it may guide treatment planning. The overall objective of an assessment is to identify all psychiatric and SUD diagnoses (with the stages of change for the latter) and to develop a biopsychosocial understanding that guides treatment planning.

Knowledge and Skills Based on Clinical Setting

Emergency Department and Inpatient Psychiatric Settings

In acute care hospital emergency departments and inpatient wards, the clinician needs to assess patients with acute SUDs, including states of intoxication, withdrawal and delirium, and patients with a primary psychiatric disorder complicated by substance use. Clinicians must identify substance intoxication and withdrawal syndromes from all major classes of substances and differentiate them from underlying psychiatric disorders. Depending on the setting, they may need to manage substance-induced

aggression and withdrawal syndromes, primarily from alcohol, stimulants, benzodiazepines and opioids. Awareness of opioid intoxication and the appropriate use of naloxone is imperative. Clinicians should be familiar with benzodiazepines for alcohol withdrawal and know how to use the Clinical Institute Withdrawal Assessment for Alcohol, revised (CIWA-Ar)⁷⁷ or a similar scale. In addition, clinicians should be familiar with using the Clinical Opioid Withdrawal Scale to determine the severity of opioid withdrawal and how to refer for or initiate opioid agonist therapy (OAT) to relieve withdrawal symptoms. Importantly, psychiatrists should be able to decide when hospitalization is indicated for a patient with a SUD, for example, complicated withdrawal syndrome or severe medical or psychiatric comorbidities.⁷⁸ The risk of suicide and aggression/violence is elevated in acute intoxication and withdrawal states. It should be monitored closely, using de-escalation techniques, chemical/physical restraint and security involvement. All patients with intoxication or withdrawal states should be re-assessed when symptoms have resolved for the presence of a SUD, their readiness to change, persisting psychiatric symptoms and a safety risk assessment if indicated. Appropriate follow-up care with addiction or concurrent disorders services should be arranged.

Table 2. A comparison of the clinical features of idiopathic psychosis (e.g., schizophrenia) versus substance-induced psychosis (SIP).

Primary psychoses	SIP
Limited and intermittent substance use involving substances associated with psychoses or use of other substances not associated with psychoses.	Heavy and persistent substance use involving substances associated with psychoses (i.e., cannabis and stimulants).
Symptoms appear before heavy substance use.	Symptoms appear only during periods of heavy substance use/ sudden increase in potency.
Symptoms persist despite drug abstinence.	Symptoms abate or are reduced with drug abstinence.
Antipsychotics markedly improve symptoms.	Antipsychotics typically do not improve symptoms.
Often present with bizarre delusions, auditory hallucinations and/or thought disorder.	Often present with non-bizarre delusions and/or visual hallucinations.
Poorer insight into their psychosis.	Better insight into their psychosis.
Disorganized thought form (e.g., loose associations, tangential or circumstantial speech).	Thought form more organized and sequential.
Less severe symptoms of mania upon admission.	More severe symptoms of mania upon admission.
Less rapid abatement of disturbed behaviour during hospitalization.	More rapid reduction of disturbing behaviour during hospitalization.
More likely to have a family history of psychotic disorders.	Less likely to have a family history of psychotic disorders.
More positive and negative symptoms.	Fewer positive and negative symptoms.
Independent of substance use.	Induced mainly by substance use.
Less frequently accompanied by feelings of anxiety and depression.	Accompanied by stronger feelings of anxiety and depression.
Urine toxicology is sometimes positive.	Urine toxicology is usually positive.

Sources.^{146,147}

Outpatient–Community

In outpatient and community mental health treatment settings, many patients will be using substances, ranging from low-risk amounts (e.g., one joint of cannabis a week) to problematic use (e.g., four bottles of beer daily) and some may meet the criteria for a SUD. All patients with any amount of substance use should be able to access evidence-based addiction treatment.^{15,16,79–83}

Psychiatrists working in these settings should be aware of the community and hospital resources available for patients seeking addiction treatment, including evidence-based harm reduction services, withdrawal management facilities, community-based treatment programs, medication-based clinics, private counselling and residential treatment centres. A recent development in addiction care has been the development of Rapid Access Addiction Medicine (RAAM) clinics, which provide short-term care, primarily for patients with AUD and opioid use disorder (OUD).^{84–86} Psychiatrists need to know how patients can access these services. In addition, clinicians should advocate for their patients with SUD to receive adequate SUD and medical assistance and provide ongoing care to help manage psychiatric comorbidity.

In addition to supporting mental health patients in accessing addiction services, psychiatrists must provide care to patients who use substances. The high prevalence of substance use by persons with psychiatric disorders requires all outpatient clinics to accept patients with mild–moderate severity levels of SUD to provide psychiatric care and encourage involvement in addiction services. Patients with high severity of mental health symptoms and substance use will benefit from concurrent disorders care, with integrated treatment⁸⁷ including evidence-based pharmacotherapy and psychosocial interventions. However, the availability of these clinics is limited. Collaborative or parallel care models are better than declining care for these high-needs patients. Virtual care, with visits by video or phone, can expand access to care for many patients and is often suitable for patients with concurrent disorders who may have difficulties travelling to a clinic or office.^{88–92}

In addition to structured treatment programs, clinicians should be aware of additional resources for people with SUD. These include mutual support groups such as Alcoholics Anonymous and SMART Recovery groups. Groups meet in person or virtually, a low-barrier option for many if they have access to a cell phone. Additionally, persons with SUDs may find many reputable resources with information online. Other tools for recovery include smartphone apps, which offer a

range of approaches and supports with ever-increasing sophistication. Clinicians need to support patients with SUDs to find and use the interventions that will help them reduce or abstain from substance use to improve their mental and physical health. Clinicians should regularly ask about substance use in follow-up appointments to identify ongoing use and changes in use that may alter psychiatric management. Outpatient psychiatrists should be able to use brief interventions for SUD, including motivational enhancement and relapse prevention strategies. In addition, psychiatrists should familiarize themselves with medications for SUD, including meaningful drug interactions and potentially severe side effects.

Consultation–Liaison

In the consultation–liaison (C/L) service, psychiatrists are often asked to assess patients with various clinical problems associated with substance use, ranging from substance-induced conditions to co-occurring disorders. Like in the ED, the psychiatrist needs to diagnose and manage acute substance intoxication and withdrawal, including but not limited to alcohol withdrawal, delirium and other cognitive disorders associated with AUD (e.g., alcohol-related dementia, Korsakoff syndrome and Wernicke encephalopathy) as well as opioid intoxication and withdrawal. The C/L psychiatrist should be able to advise the medical team on the appropriate management of withdrawal syndromes in medically ill patients, for example, a patient with compromised liver function. Depending on the availability of inpatient addiction medicine care, the psychiatrist may need to be able to initiate medications to treat SUDs, including medicines for tobacco and AUDs, as well as OAT in patients with moderate to severe OUD. C/L psychiatrists may also need to manage patients already on OAT or temporarily prescribe opioids for admitted patients to prevent withdrawal. Finally, the C/L psychiatrist must ensure patients receive follow-up for addiction treatment and OAT after discharge. Discontinuing opioids in patients with OUD falls below the standard of care and is life-threatening. With this practice, many patients will leave against medical advice and be at increased risk of morbidity and mortality from an overdose due to loss of tolerance while in the hospital. C/L psychiatrists should be adept at engaging patients in treatment for their SUD with skills in MI or brief interventions and familiarity with the process of referrals to outpatient care. Like the community psychiatrist, they need to be aware of the local community and hospital resources available to treat or help manage a patient with a SUD and facilitate connection with programs before discharge.

Specialized Addiction Centres

Psychiatrists can also contribute to patients' care in specialized addiction treatment centres. For example, a classic study demonstrated that the severity of psychiatric symptoms represents the strongest predictor of prognosis in SUD treatment.¹⁴ Identifying and treating co-occurring psychiatric conditions improves retention in treatment for people with SUDs.^{93–95} Psychiatrists can prescribe medication for co-occurring psychiatric disorders and offer support and education regarding concurrent mental health and addictions to professionals working in specialized addiction treatment centres, helping them to understand patients and work with them more effectively.

Treatment of SUDs

Psychosocial and Behavioural Treatments

Psychosocial and psychotherapy interventions have been vital components of addiction treatment for decades, although studies to support specific, structured, evidence-based talk interventions are more recent. These treatments are usually delivered by non-psychiatrists and often in non-medical treatment programs, but psychiatrists need to be aware of evidence-based non-pharmacological interventions that support recovery. These may be offered in individual or group sessions or structured programs and often include some or all of the following evidence-based practices: psychoeducation, MI, relapse prevention, cognitive behavioural therapy, 12-step facilitation, contingency management, family-based interventions, mindfulness-based relapse prevention, and acceptance and commitment therapy.^{96–99}

It is essential to recognize that the psychosocial determinants of health have a profound impact on substance use and that assisting a patient in obtaining housing, financial support and a safe environment is necessary for any psychotherapy intervention to be effective.

All psychiatrists, including those not working in addiction treatment settings, need vital skills to support patients in recovery. Skills include an accepting, non-judgemental attitude, interventions for harm reduction and familiarity with identifying a patient's stage of change. Foundational skills in MI enable psychiatrists to support patients at all stages of change.³⁶ It is helpful to be comfortable exploring triggers for substance use relapse using a collaborative behaviour chain analysis approach that views relapse as a learning opportunity. For example, this could include exploring high-risk situations, cravings, social pressures, difficult emotions, patterns of thinking, lack of balance in lifestyle and a patient's recovery network.¹⁰⁰ Confrontational

approaches regarding substance use are ineffective and have no role in current addiction treatment.^{101–104}

Often care is difficult for people with SUD to access. Psychiatrists should be aware of local addiction harm reduction and treatment resources and advocate for their patients to be able to access them.

It is essential to recognize that many people use substances as a coping strategy for trauma-related memories, emotion dysregulation, anxiety, unsafe living situations and more. Providing supportive interventions and reducing harm can help people begin changing their substance use. Access to evidence-based talk interventions will vary by community and patients should be encouraged to access available in-person treatments and explore online virtual therapeutic groups.

Of note, many people recover from SUD without formal addiction treatment. Providing good psychiatric care with a regular inquiry about and encouragement to change SUD behaviour may help many patients reduce or achieve abstinence without additional interventions.¹⁰⁵ However, treating a psychiatric disorder without addressing a comorbid SUD is not recommended.

Pharmacotherapy

Psychiatrists should be familiar with pharmacotherapy for SUD. There is evidence to support the treatment of AUD, OUD and tobacco use disorder (TUD) with medications.^{19–21,106–108}

Pharmacological Treatment of AUD

All patients with moderate to severe AUD should be offered a trial of pharmacotherapy to help treat their AUD. Both naltrexone and acamprosate have Health Canada indications for treating AUD based on their effectiveness in reducing cravings, heavy drinking days and increasing abstinence rates.¹⁰⁹ Both can be prescribed while a patient is still drinking alcohol. Naltrexone is started at 25 mg for three days, then increased to the standard dose of 50 mg daily. Doses above 50 mg daily are not typically required nor advised. Patients should have baseline liver function tests with periodic monitoring. Those with should be tried on another agent. Acamprosate dosing is 666 mg three times daily. It is renally cleared, so baseline renal function testing is required. Disulfiram is an effective agent for select patients, but it needs to be compounded and should not be first line. Patients need to be committed to abstinence. The use of alcohol on disulfiram can produce a profound physical response that may be severe and potentially fatal, requiring careful patient selection.

The usual dosing is 250 mg orally once a day, witnessed by their primary support person, or as daily witnessed ingestion at a pharmacy. Liver function testing should be done at baseline and monitored periodically. Gabapentin and topiramate are off-label second-line treatments and may be helpful for alcohol cravings and anxiety reduction.^{18,109,110} Dosing in the limited treatment trials for gabapentin has been 900–1800 mg per day in divided doses and for topiramate has been 100–150 mg twice daily (BID). Titration to these doses should be gradual and baseline renal function testing should be done.

Pharmacological Treatment of OUD

The expectation of the role of the psychiatrist in supporting persons with OUD is highly variable, depending on the treatment setting.^{111–114} For example, in some settings, psychiatrists may be primary OAT prescribers, whereas, in others, they may support concurrent disorder management in conjunction with a separate OAT prescriber, often family doctors.^{111–114} Nevertheless, psychiatrists should be familiar with the indications for OAT and able to assist a patient in attending a clinic or primary care setting to initiate or continue OAT.^{111–114} In some settings, psychiatrists will need the skills to discuss OAT, assist in choosing a medication, obtain consent, initiate OAT and manage or refer for ongoing treatment.^{111–114}

OAT is the standard of care for OUD. Regarding OAT selection, buprenorphine-naloxone is generally considered first-line, given its superior safety profile and lower risk of diversion,^{20,21,115,116} while methadone is second-line. However, retention in treatment is usually higher with methadone than with buprenorphine-naloxone.¹¹⁷ A federal exemption is no longer needed to prescribe methadone, but patients on methadone are generally managed in specialized clinics. New long-acting formulations of buprenorphine (monthly injections or twice-yearly implants) may reduce the risk of relapse and better support recovery.^{118,119} Withdrawal management or detoxification from opioids should not be offered as the only treatment. Naltrexone can be considered in highly motivated patients with OUD in exceptional circumstances, although the long-acting intramuscular formulation is not available in Canada.¹²⁰ There is interest in the public supply of addictive drugs (such as hydromorphone and pharmaceutical-grade heroin) as a harm reduction strategy to reduce deaths from illicit opioids. Several outcome studies are in progress.¹²¹ All persons with OUD should be offered and urged to obtain a naloxone kit and to become familiar with its use.

Pharmacological Treatment of TUD

Tobacco use is prevalent in people with psychiatric disorders^{122,123} and contributes to the reduced life expectancy of the psychiatric population. Therefore, psychiatrists need to be able to support their patients in quitting smoking. Unfortunately, clinicians often do not address tobacco use with their patients or even note it in the list of diagnoses; however, treating TUD should be integrated with psychiatric care.¹⁰⁷ All clinicians should be able to routinely prescribe the Health Canada-indicated pharmacotherapies for TUD, including various forms of nicotine replacement therapy, bupropion or varenicline, provide basic counselling to support smoking cessation and referral to local and national smoking cessation programs (such as <https://www.smokershelpline.ca>). For smoking cessation, bupropion dosing is typically 300 mg daily. For varenicline, it is 0.5 mg daily for 3 days, then 0.5 mg BID for 4 days, then 1 mg BID after that, with patients staying on these medications for at least 12 weeks. Potential risks for suicidality or psychiatric deterioration with a prescription of either bupropion or varenicline should be discussed and monitored.

Prescription of Potentially Addictive Medications

All physicians need to minimize the risks of problematic use when prescribing potentially addictive medications. For psychiatrists, the prescription of sedative-hypnotics and psychostimulants should be monitored closely due to their risk for physiologic dependence, misuse and diversion. Sedative-hypnotic drugs should be limited to short-term use when possible and clinicians must monitor for problematic use. Patients who have been prescribed sedative-hypnotic agents long-term need to be offered de-prescribing when indicated, including gradual tapering, switching to agents with a longer half-life and alternative medications. Benzodiazepine treatment for psychiatric disorders should be restricted and time-limited to minimize the risk of the development of benzodiazepine use disorders. Caution should be exercised in prescribing psychostimulants for attention-deficit hyperactivity disorder (ADHD) in persons with SUD or at risk for problematic use, as well as in people at risk for psychosis (e.g., schizophrenia) or mood instability (e.g., bipolar illness).¹²⁴ The Canadian ADHD guidelines recommend the non-stimulant atomoxetine as first-line for patients with comorbid ADHD and SUD.¹²⁵ Patients frequently request medications for insomnia, many of which have the potential for addiction, and physicians are encouraged to provide strategies for non-pharmacological management of sleep difficulties as first-line treatment, whenever possible.¹²⁶

Pharmacological Treatment of Other Addictive Disorders

There are no currently indicated medications for stimulant use disorder, cannabis use disorder and gambling disorder. Practicing psychiatrists are encouraged to monitor developments in medications for SUDs, as many medication trials are in progress to identify effective treatments. Notably, evidence-based pharmacotherapy combined with psychotherapeutic intervention is considered the best practice in SUD treatment and can maximize successful outcomes to achieve sustained remission.¹²⁷

Pharmacotherapy for Concurrent Disorders

Comorbid psychiatric disorders, particularly mood, anxiety and PTSD, are highly prevalent among individuals with SUD.^{4–6,10,11,64,79,128–130} However, there is a lack of consistent evidence to suggest that altering pharmacotherapy for treating a psychiatric disorder in the presence of SUD comorbidity is beneficial; therefore, the general recommendation is to prescribe the medication that is most likely to be accepted by the patient and is indicated for the specific psychiatric disorder being treated.^{54,55,57,58,131,132} Recognize that many psychiatric symptoms remit with abstinence. Still, patients with, or who are likely to have, persistent psychiatric symptoms that meet the criteria for a disorder should be treated with indicated pharmacotherapy for that disorder, even if they are still using substances. However, prescribing psychostimulants for ADHD in people with an active stimulant use disorder is generally not recommended, with non-stimulants preferred as first-line. Recent publications recommend treating psychotic disorders, depression, eating disorders, ADHD and personality disorders, and SUDs.

Psychiatrists should be aware of patients' growing interest in using cannabinoids, psychedelics (such as psilocybin) and ketamine to treat psychiatric symptoms. Despite a lack of evidence, many patients use cannabis for PTSD symptoms and other disorders.^{133–136} There are studies in progress using psychedelics, such as psilocybin, in specialized psychotherapy sessions to explore specific issues with the goal of healing and transformation.^{137–140} However, cannabinoids and psychedelic treatments for psychiatric and SUD remain experimental.

Challenges and Solutions for Education

Canada has a limited number of psychiatrists with additional training and expertise in addiction care, so

residency programs in Canada should use the expertise within their departments and encourage psychiatric residents to work with addiction medicine specialists to meet their learning needs. In addition, psychiatrists who received little training during residency in the treatment of SUD are encouraged to develop their knowledge, skills and attitudes for managing SUD through continuing medical education activities to supervise residents better and expand their clinical expertise. Professional organizations, such as the American Academy of Addiction Psychiatry (<https://www.aaap.org>), the Canadian Centre on Substance Use and Addiction (<https://www.ccsa.ca>), the Canadian Society of Addiction Medicine (<https://csam-smca.org>), the American Society of Addiction Medicine (<https://www.asam.org>) and the International Society of Addiction Medicine (<https://isamweb.org>) offer a variety of training and educational opportunities. Information and education can also be found in online provincial resources, such as Meta:Phi (<http://www.metaphi.ca>), the British Columbia Centre on Substance Use (<https://www.bccsu.ca>), the Centre for Addiction and Mental Health (<https://www.camh.ca>) and the Atlantic Mentorship Network for Pain & Addiction (<https://www.atlanticmentorship.com>).

Conclusions

Patients with SUD occur in all psychiatric practice settings. Concurrent disorders are the norm rather than the exception. Despite the prevalence and consequences of SUDs and their frequency of presentation for potential intervention, most people with or without a comorbid psychiatric disorder do not receive any treatment.^{141–144} If they do, they often report unmet needs.¹⁴⁵ Psychiatrists are crucial in treating people with concurrent psychiatric symptoms and SUDs. All psychiatrists need the knowledge, skills and attitudes necessary to identify and help manage primary and comorbid SUD in the patients they see. Practicing psychiatrists, especially those who supervise residents, may need to seek out educational opportunities to provide this care to improve patient outcomes and help train future psychiatrists. Clinicians can then provide appropriate feedback and coaching to residents in their training when they are asked to evaluate EPAs on the SUD and become role models for residents. In addition, psychiatrists also need to be leaders in providing care for patients with concurrent disorders, given their unique skill sets in engaging patients, applying psychotherapeutic techniques, and seamlessly integrating these with evidence-based pharmacotherapies.

Through the CPA and the RCPSC, the psychiatric profession must ensure that practicing psychiatrists possess

the knowledge, skills and attitudes to manage patients with SUD effectively. Furthermore, as a profession, psychiatry should increase its efforts to provide training in the assessment and treatment of patients with addictive disorders to better support this underserved population.

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