

A serene sunset scene over a body of water. The sun is low on the horizon, creating a warm orange and yellow glow that reflects on the water's surface. The water is dark blue with numerous small, concentric ripples. A white, rounded rectangular box is superimposed over the upper half of the image, containing the title text.

# Treating Smokers with Co-occurring Mood and Anxiety Disorders

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## BACKGROUND

Individuals with mental illness display a higher prevalence of smoking and lower long term cessation rates compared to individuals without mental illness<sup>1</sup>. The prevalence of smoking among individuals with specific mood and anxiety disorders are reported below<sup>1</sup>:

**51%-70%**

**Bipolar Disorder**

**40% - 60%**

**Major Depressive Disorder**

**8%-66%**

**Anxiety Disorders**

## MOOD AND ANXIETY DISORDERS

Mood disorders are a class of clinical conditions characterized by intense and persistent changes in mood, which can impact an individual's thoughts, feelings and performance in daily activities<sup>2</sup>. Although anxiety disorders are not categorized as a mood disorder, they can also significantly impact an individual's thoughts, mood and behaviour<sup>2</sup>.



### Bipolar Disorder

- Bipolar disorder is characterized by extreme and episodic mood swings<sup>3,4</sup>.
- Individuals with bipolar disorder will be in one of three states for a certain period of time<sup>3,4</sup>:
  - **Manic state** (elevated mood),
  - **Depressed state** (low mood), and
  - **Normal state**.



### Major Depressive Disorder

- Major depressive disorder (MDD) consists of severe negative emotions, as well as cognitive and behavioural deficits which persist for a long period of time (i.e. longer than two weeks)<sup>4,5</sup>.
- Individuals with MDD are most likely unable to improve their negative emotions and maladaptive thinking patterns on their own<sup>5,6</sup>.



### Anxiety Disorders

- Anxiety disorders are characterized by extreme worry or fear with no apparent cause and occur more often than not, for at least 6 months<sup>4</sup>.
- Anxiety disorders affect the individual's cognitive, behavioural and physical well-being<sup>7</sup>.
- There are several types of anxiety disorders, including: phobias, acute stress disorder, panic disorder, obsessive compulsive disorder, generalized anxiety disorder, post-traumatic stress disorder and social anxiety disorder<sup>4</sup>.

For a full list of mood and anxiety disorders and their symptoms, please refer to the Diagnostic Statistics Manual 5<sup>th</sup> Edition (DSM-5) which can be downloaded [here](#).

# TREATMENT FOR SMOKERS WITH CO-OCCURRING MOOD AND ANXIETY DISORDERS



Smokers presenting co-occurring mental health and substance use disorders often view quitting as a difficult process and have a higher chance of experiencing relapse<sup>6, 8</sup>. **For an optimal tobacco cessation treatment**, the Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment (CAN-ADAPTT) recommends a **combination of psychosocial interventions and pharmacotherapy**<sup>1</sup>. CAN-ADAPTT Guidelines include the following clinical considerations for clients with mental illness and/or other addictions<sup>1</sup>:

- Conducting regular, brief screenings for mood changes is encouraged since it may affect quitting and can be part of withdrawal, grief over loss of identity as a smoker, or emergence of a depressive disorder.
- The withdrawal/anxiety experienced by persons abstaining from smoking should be recognized and addressed, especially in acute care facilities.
- Consider that persons with mental illness and/or addiction(s) who smoke might need higher doses of nicotine replacement therapy.
- Pharmacotherapy use may be required for a longer duration for persons with mental illness and/or addiction(s).
- Assess for interactions with medications used for treating comorbid conditions.

CAN  ADAPTT

## Psychosocial Approaches

The goal of psychosocial interventions is to help clients manage their emotions, thoughts and stress independently by providing them with the tools and support needed to appropriately cope with their triggers<sup>6, 9</sup>. Psychosocial interventions can also help prevent relapse by restructuring the client's thinking so they can anticipate potentially high-risk situations and plan ahead to avoid or manage them<sup>6, 9</sup>. Some psychosocial interventions that you can incorporate as part of your smoking cessation treatment plan for clients presenting mood/anxiety disorders are listed below:



**Cognitive Behavioral Therapy:** Cognitive Behavioural Therapy (CBT) is an approach used to help clients identify and change negative thoughts, emotions, and behaviours associated with specific situations or triggers, which may lead to relapse<sup>6</sup>. CBT can help reduce symptoms of depression and anxiety by helping clients understand the connection between their perception of events and their immediate reaction. CBT also aims to help clients develop effective problem solving and coping skills to manage unhelpful ways of thinking and improve their mood, which can increase their chances of making a successful quit attempt<sup>6, 9</sup>.

The **Self-Awareness - Managing your Mood** workbook (page 8) includes a “**Nonsmoking Game Plan**” that your clients can complete to help develop coping strategies to prepare for urges, cravings or high-risk situations.



**Motivational Interviewing:** Motivational interviewing (MI) is a client-centered approach to care that can



increase your client's engagement in positive behaviour change by enhancing their motivation to quit and helping them overcome ambivalence to change<sup>6, 10</sup>. Clients with mood and anxiety disorders may display reduced motivation, as well as a number of complexities that can influence their ability to quit, including cognitive distortions and psychiatric symptoms<sup>11</sup>.



It may be necessary to tailor MI skills to meet the specific needs of your client by using plain language and helping them understand the relationship between their substance use and mental health<sup>6, 11</sup>.



Incorporating the spirit and key skills of motivational interviewing in your sessions will encourage your clients to actively participate in their treatment plan, resulting in greater self-efficacy and improved treatment outcomes<sup>6, 12</sup>.

**Mindfulness/Relaxation:** Quitting or reducing smoking can be stressful and it is common for clients experiencing mood/anxiety disorders to feel increased levels of stress when making a quit attempt<sup>6</sup>. Mindfulness and relaxation techniques can help clients manage feelings of stress, depression and anxiety, which can increase their ability to handle triggers and reduce the risk of relapse<sup>6</sup>. Encourage your client to try the following relaxation and mindfulness exercises for stress management<sup>6</sup>:

- Deep breathing,
- Muscle Relaxation,
- Visualization.



The [Self-Awareness - Managing your Mood](#) workbook (**page 9-10**) includes relaxed breathing exercises your client can try when feeling stressed.



**Psychoeducation:** Some individuals may use tobacco as a means to “self-medicate” in order to alleviate their symptoms of depression and anxiety<sup>13</sup>. Nicotine, however, is a stimulant and can actually increase feelings of anxiety, especially because of withdrawal<sup>14, 15</sup>. In fact, quitting smoking is associated with lower levels of anxiety and depression, and improved psychological quality of life<sup>16</sup>. Below are some general guidelines to follow to help your client make an informed decision about their quit attempt:



Help your client understand the connection between their mood and smoking<sup>17</sup>.



Identify the positive effects of quitting smoking on both physical and mental health<sup>17</sup>.



Distinguish between withdrawal symptoms vs. psychiatric symptoms<sup>17</sup>.

**Group Therapy:** Group counselling can be a great opportunity for clients to share their experiences with other members in a safe, tobacco free environment<sup>6, 17</sup>. For clients with mental health issues, attending groups can also help reduce feelings of isolation and stigma experienced<sup>6</sup>. It is important to remember however that some clients with mood and/or anxiety disorders may not feel comfortable speaking and sharing personal experiences in large group settings<sup>6-7, 17</sup>. In fact, this may be anxiety-provoking and can act as a trigger in some instances. Before deciding to provide group-based therapy, assess your client's needs and preferences and offer alternatives, such as individual counselling, if appropriate<sup>17</sup>. There are several types of groups that clients can participate in, a few are listed below<sup>16</sup>:



- ✓ Psychoeducation groups
- ✓ Support groups
- ✓ Skills-based groups

**Social Support:** Research has shown that social support is associated with positive tobacco use outcomes<sup>17</sup>. Social networks, including family and friends or external resources, such as helplines and distress centres, can offer your client support when they are experiencing withdrawal symptoms, anxiety or a depressive episode<sup>6</sup>. Although social support is not recommended as stand-alone treatment, it is considered an important component to mood management and smoking cessation treatment. There are different social supports your client can receive<sup>6, 18</sup>:



**Emotional:** venting, listening to your client's quit attempt.



**Instrumental:** providing your client with treatment options for cravings, withdrawal, or psychiatric symptoms.



**Informational:** informing your client on the connection between their smoking behaviour and mood.

The [Self-Awareness - Managing your Mood](#) workbook (page 3) includes a list of internal and external supports clients can contact to help manage their mood and support smoking cessation.

## Pharmacological Treatment



It is common for individuals to experience low mood when making a quit attempt<sup>19</sup>. For the client with a mood and/or anxiety disorder, these feelings can be even more intense<sup>17, 19</sup>. Often times individuals will also confuse nicotine withdrawal symptoms with symptoms of depression and anxiety<sup>19</sup>. As a healthcare provider it is important to monitor doses and side effects if your client is taking psychiatric medications, as quitting smoking may impact certain medications<sup>20-22</sup>. Quitting or reducing smoking can also lower the dose and cost of psychiatric medications needed for clients<sup>20-22</sup>.

There are many pharmacological treatments that can be given to smokers with mood or anxiety disorders to help reduce cravings and withdrawal symptoms<sup>23</sup>. As mentioned above, best-practice guidelines recommend a combination of pharmacological and psychosocial interventions when treating smokers with mood and anxiety disorders<sup>1</sup>. First-line medications for tobacco dependence are listed below:

### Nicotine Replacement Therapy (NRT)

- Helps reduce withdrawal symptoms by stimulating nicotine receptors<sup>24, 25</sup>.
- There are different types of NRT available<sup>24, 25</sup>:
  - Nicotine Patch
  - Nicotine Inhaler
  - Nicotine Gum
  - Nicotine Lozenge
  - Nicotine Mouth Spray



### Bupropion

- Nicotine-free medication prescribed to help cope with negative affect (i.e. withdrawal and cravings) that persist within the first few weeks after quitting<sup>26, 27</sup>.
- Available under the trade name Zyban for smoking cessation<sup>26, 27</sup>.

### Varenicline

- Nicotine-free medication prescribed to reduce the intensity and frequency of cravings and withdrawal symptoms after quitting<sup>28, 29</sup>.
- Varenicline acts as partial agonist of nicotine receptors in the brain to reduce cravings and withdrawal symptoms<sup>28, 29</sup>.
- Available under the trade name Champix<sup>28, 29</sup>.

## EAGLES



**The EAGLES study**, conducted by Anthenelli et al. (2016), evaluated the neuropsychiatric safety risk and efficacy of varenicline and bupropion compared to nicotine patch and placebo in smokers with and without psychiatric disorders<sup>30</sup>. **Main findings**<sup>30</sup>:

-  There was no significant increase in neuropsychiatric adverse events resulting from the use of varenicline or bupropion, relative to NRT or placebo.
-  Varenicline was more effective than bupropion, nicotine patch and placebo for helping smokers achieve smoking cessation.
-  Bupropion and nicotine patch were more effective than placebo for helping smokers achieve smoking cessation.



## Tips when prescribing to clients with mood disorders

- ✓ Bupropion is an effective option for clients with or without a history of depression<sup>31</sup>.
- ✓ For clients with a history of major depression, bupropion can help with relapse prevention<sup>6</sup>.
- ✓ **Combination therapy** with both bupropion and NRT can help with smoking reduction and increase rates of cessation among clients with depression<sup>32</sup>.
- ✓ **Monitor** - it is important to monitor clients for changes in mood as well as any adverse side effects when quitting smoking, especially if you are prescribing medication to clients with a history of neuropsychiatric disorders<sup>6</sup>.
- ✓ **Bipolar Disorder** - clients with a history of bipolar disorder should be placed on a mood stabilizer before being prescribed bupropion<sup>6</sup>.



### Keep in mind...

Before prescribing smoking cessation medication, be sure to complete a comprehensive assessment with your client to screen for current or history of mood disorders, which may impact treatment<sup>6</sup>.



## ADDITIONAL RESOURCES



1. **TEACH Webinar:** Tobacco, Depression and Anxiety: Evidence-Based Treatment Approaches  
<http://camh.adobeconnect.com/psxwwdr2iemk/>
2. CAN-ADAPTT Guidelines, Specific Populations: Mental Health and/or Other Addictions(s). Download [here](#).
3. CAMH Nicotine Dependence Service, Self-Awareness – Managing Your Mood Workbook. Download [here](#). \*Also available for download on the STOP Portal under the “Download Forms” Tab.
4. Mental Illness and Smoking: Key Messages for Health Care Providers and Policy Makers. Download [here](#).

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