Chapter 3: Working with Behavioral Health Populations

Although there has been a significant decline in tobacco use in the United States over the last decade, not all subgroups have benefited equally.

Tobacco cessation among behavioral health populations (those with comorbid substance use and mental health diagnoses) continues to be a significant problem. As of 2015, the Centers for Disease Control estimated the smoking rate in the United States to have dropped to 15.1% for the general population. This is a promising statistic; however, the sub-population of individuals with behavioral health diagnoses does not resemble the general population in their smoking patterns.

For instance, those suffering from mental illness:

- smoke 40% of the cigarettes sold in the United States although they only encompass 25% of the entire population (CDC, 2013);
- smoke about 2 more packs of cigarettes per month than adults with no mental illness (16.3 vs. 14.2 packs of cigarettes; SAMHSA, 2017);
- tend to take deeper puffs, more puffs per cigarette, and shorter breaks between puffs (Tidey et al., 2005; Williams et al., 2010; Williams et al., 2011).

In addition, smoking is nearly five times more common among individuals with schizophrenia, bipolar disorder, post-traumatic stress disorder, and alcohol/illicit drug use disorders compared to people without these disorders (Prochaska, Das, & Young-Wolff, 2017).

Poverty has also been linked to smoking, such that higher smoking rates are found among poorer behavioral health consumers. Of behavioral health consumers, 48% of those below the poverty line smoke compared to 33% of those above the poverty line (Prochaska et al., 2017).

Implications of Tobacco Use in Behavioral Health Populations

Cigarette smoking is an addictive behavior with significant long and short term negative health effects. These effects can be exacerbated by comorbid mental health or substance use disorders, leading to much higher mortality rates among behavioral health populations.

- On average, individuals with chronic mental illnesses and substance use disorders die **10-25 years earlier** than individuals in the general population (Colton & Manderscheid, 2006; Walker, McGee, & Druss, 2015; World Health Organization, 2013).
- The top three causes of death in behavioral health populations are cardiovascular disease, lung disease, and diabetes mellitus; these conditions are known to be exacerbated by or otherwise related to smoking tobacco (Mauer, 2006).
- Behavioral health clients who smoke may require higher psychotropic medication

dosages compared to their non-smoking counterparts (de Leon, Diaz, Aguilar, Jurado, & Gurpegui, 2006; Prochaska, 2010). Ingredients in tobacco can accelerate the metabolism of some psychotropic medications, reducing their therapeutic benefit and requiring more medication to achieve the same effect (Prochaska, 2011).

Tobacco cessation for clients coping with mental illness and/or substance abuse disorders can be very challenging. These groups face unique challenges to quitting due to heavier smoking patterns and different effects of nicotine on their bodies and minds. Additionally, targeted support and assistance for quitting is often not provided to behavioral health patients; yet treatment options and approaches are critically needed. Many of these clients rely on their mental health providers to address both their physical and mental health needs. Research has shown that smoking and mental illness are closely linked; therefore, integration of tobacco cessation into these programs can not only improve clients' overall health, but also assist in the treatment of their behavioral health problems. These integrated approaches to tobacco cessation have much higher smoking abstinence rates than the usual care approach when treating behavioral health clients (e.g., McFall et al., 2005; McFall et al., 2006; Prochaska, 2010).

Possible Barriers to Integrating Smoking Cessation into Mental Health and Substance Abuse Treatment

- Treatment providers may fear that the addition of another treatment goal or focus could:
    - discourage client enrollment,
    - encourage dropout from treatment, and/or
    - be a barrier for success of treatment for the primary problem.

- Tobacco cessation may be a lower priority:
    - Counselors who feel overwhelmed with other client demands (such as co-occurring mental illness or substance abuse, transportation, child care, etc.) tend to prioritize these matters over smoking cessation.

- Treatment centers may not have smoke-free policies or do not strictly enforce them, which may unintentionally increase smoking among clients or hinder clients trying to quit smoking.
    - Staff members who smoke may resist the implementation of smoke-free policies, making it more difficult to enforce among clients.

- According to a Maryland survey of Alcohol and Drug Abuse Administration and Mental Hygiene Administration employees, approximately 15% of behavioral healthcare workers smoke. Alternatively, 20-30% of behavioral healthcare workers are former smokers, and thus can be models to both staff and clients alike of how to successfully quit.

- Clinicians willing to promote tobacco cessation are faced with additional barriers which include:
    - Insufficient training and educational tools for staff to address tobacco dependence.
    - Lack of access to smoking cessation services.
    - Insufficient financial reimbursement for tobacco cessation programming.

- Clients in mental health or substance abuse treatment programs are often ambivalent about taking on smoking cessation as an additional treatment goal, because they:
    - fear leaving behind something that is of value to them, and
    - struggle with self-control.

Self-Control and Smoking Cessation

Humans have a limited supply of mental energy to devote to controlling behavior and managing emotions—a task called "self-control" (Muraven & Baumeister, 2000). Low self-control is linked with smoking in adolescence and adulthood, and childhood self-control is predictive of lifelong smoking in longitudinal samples (e.g., deBlois & Kubzansky, 2015; Daly, Egan, Quigley, Delaney, & Baumeister, 2016). Coping with daily stressors can use up some of this mental energy. This is important to keep in mind when working with individuals suffering with mental illness and substance use issues, who often experience many stressors such as stigma, joblessness, homelessness, negative emotions, and difficulty resisting temptations to use substances. Therefore, those suffering with mental illness or substance use may be left with less energy to devote to quitting smoking. Thus, helping these individuals cope more effectively with life stressors can support their smoking quit attempt.

Providers can support clients' self-control capacity by:

- Providing case management for referrals to meet basic needs (e.g., temporary housing, food stamps, etc.).
- Offering medications to reduce cravings for cigarettes and/or or other substances.
- Help manage triggers to smoke by making the treatment center smoke-free and enforcing this policy.
- Make the quit attempt a collaborative process by notifying other staff of the client's wish to quit smoking so that they can provide additional support

General Recommendations for Behavioral Health Treatment Programs

Staff Level:

- The entire staff needs adequate training to address the concerns and challenges faced by clients attempting to quit smoking in addition to other treatment plans.
    - BH2 has staff/admin trainings available online!
    - Additionally, several staff should receive specialized training to implement tobacco cessation programs within the agency.

- Behavioral health staff members who smoke should be encouraged to reduce and/or quit smoking.
    - Provide smoking cessation resources to staff.
    - Provide incentives to staff who quit.
    - Discuss the limitations of smoking at work (e.g., not smoking in front of clients).

Facility Level:

- Behavioral health programs should provide smoking cessation assistance to all clients and staff who smoke. Studies have shown that when smoking cessation is integrated into behavioral health treatment:
    - Client enrollment increases and dropout rates *do not* increase.
    - Treatment outcomes are improved.
    - Implementation of smoke-free policies is smoother.

- Smoke-free policy regulation can help integrate smoking cessation programs into residential and outpatient mental health and substance abuse treatment centers. Facility-wide implementation is best because:
    - It is cohesive action for staff and clients in creating the new environment.
    - It helps to reinforce healthy behaviors among clients and staff.
    - It promotes a drug-free environment for patients both in and out of treatment.

Efficacious Interventions for Tobacco Use in Behavioral Health Populations

Although behavioral health clients may face many barriers when quitting smoking, they can successfully quit. Behavioral health clients are most successful when they receive assistance. There are multiple evidence-based treatments for tobacco use in behavioral health clients:

- Brief interventions (e.g., 5 A's, MI): A randomized trial of patients with serious mental illness (schizophrenia, schizoaffective disorder, or bipolar I disorder) demonstrated that those who received a brief MI session plus feedback were more likely to seek tobacco cessation help and make a quit attempt within 1 month compared to those who received only interactive education (Steinberg et al., 2016).
- Nicotine replacement therapy (NRT): A systematic review and meta-analysis found that

NRT use was associated with being twice as likely to attain abstinence for 6 months, compared to those receiving a placebo (Moore et al., 2009).

- Medications (bupropion and varenicline): These medications are associated with being 2-3 times more likely to successfully quit smoking among the behavioral health population (Fiore et al., 2008). A randomized trial comparing long-term smoking abstinence using either bupropion, varenicline, or a placebo found that varenicline was most effective, with 23% of varenicline participants abstinent one year after baseline, compared to 14.6% in the bupropion group, and 10.3% in the placebo group (Jorenby et al., 2006).
- Individual and/or group counseling: Patients who had 31-90 minutes of contact in smoking cessation interventions were about 200% more likely to remain abstinent from smoking than patients who had no contact minutes (Fiore et al., 2008).
- Staged care interventions: A randomized trial of patients with serious mental illness (SMI) found that an increase in progression through the stages of change was associated with an increase in dose of smoking cessation treatment (DiClemente et al., 2011). Another study found that cessation treatment explained the relationship between stage of change and smoking abstinence (Ferron et al., 2016).
- Combination Therapy: A systematic review reported that pharmacotherapeutic cessation aids combined with behavioral treatment is well-tolerated by and effective for those with SMI (Evins, Cather, & Laffer, 2015). A randomized trial of patients with schizophrenia and bipolar disorder found pharmacotherapy with varenicline combined with cognitive behavioral therapy improved long-term smoking abstinence compared to cognitive behavioral therapy alone (Evins et al., 2014).

There are many cessation recourses available in addition to providing onsite cessation programs:

- Quitlines
- Handouts with information on smoking cessation
- Referrals to nonprofit organizations that provide free services, such as the Health Department or Nicotine Anonymous
- Websites that provide additional information and self-help guidelines to quit smoking, etc. For example:
    - American Legacy Foundation's Become An Ex Program- http://www.becomeanex.org/
    - Smoking Stops Here (MD Quitline)- http://www.smokingstopshere.com/

The BH2 multiple session group manual provides information and guidelines to behavioral health agencies, including program administration and staff, regarding issues and approaches related to integrating tobacco cessation, as well as tools for providing a 4-8 session cessation program for clients.

Myths and Facts about Tobacco Use and Cessation in Behavioral Health Populations

The first priority in addressing tobacco use in behavioral health populations is education. Both providers and consumers alike have many misperceptions about the use of tobacco and access to treatment among behavioral health patients.

Myth	***Fact***
Behavioral health patients are not interested in quitting	• 77-79% of those mental illness intend to quit smoking within the next month (Prochaska et al., 2007). • Psychiatric inpatients are more interested in quitting smoking relative to the quit advice provided to them by providers (Du Plooy, Macharia, & Verster, 2016).
Tobacco is not as big of a priority as treatment for substance abuse or other mental health disorders.	• Patients with SMI die 25 years earlier than the general population (Mauer, 2006). • Individuals with SMI who smoke typically die from smoking related disease, such as cardiovascular disease and cancer (Colton & Manderscheid, 2006).
Smoke-free policies will reduce enrollment and increase patient dropout rates.	• A smoke-free policy in a residential treatment setting did not increase premature discharges (Williams et al., 2005). • Smoke-free policies in Japanese mental hospitals did not aggravate patients or increase surreptitious smoking (Hashimoto et al., 2015)
If a patient relapses into smoking, it is no use trying to quit again.	• Smokers with co-occurring disorders tend to also make approximately 5-10 attempts before sustaining a quit attempt (Ferron et al., 2011).
Quitting tobacco will make psychiatric symptoms and addiction worse.	• A study of depressed smokers showed that those who quit saw a reduction in depressive symptoms and alcohol use, compared to those who did not quit (Prochaska et al., 2008). • In substance use treatment, smoking interventions were associated with a 25% increased likelihood of long-term abstinence from alcohol/illicit drugs (Prochaska et al., 2004). • A study of hospitalized individuals with schizophrenia found significantly better global functioning over 3 years among non-smokers compared to smokers (Miyauchi et al., 2017).

Tobacco Cessation in Mental Health Treatment Settings

Individuals with mental health diagnoses face significant health challenges which are exacerbated by tobacco use. Patients with some disorders, such as schizophrenia and other SMI have smoking rates over 80%. Given that tobacco use is the norm among many individuals with mental illness, tobacco cessation approaches must be tailored to this population.

Tobacco Use and Mental Illness

Mental Disorder Diagnosis	Lifetime Diagnosis in U.S. Population (%)	Current Smoking Rates
No diagnosis	75-80% [A]	15%[A]
Any mental illness	25% [A]	36.5%[A]
Anxiety disorders	18%	28%[B]
Mood disorders	9.5%	29%[B]
Major depressive disorder	7%	31-33%[B,C]
Post-traumatic stress disorder	6.4%	45.3%[D]
Psychosis	1%	59%[E]

Source:

A. Substance Abuse and Mental Health Services Administration. Results from the 2013 National Survey on Drug Use and Health: Mental Health Detailed Tables [PDF–3.2 MB]. Rockville, MD: *Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality* [accessed 2016 May 18].

B. Lê Cook, B., Wayne, G. F., Kafali, E. N., Liu, Z., Shu, C., & Flores, M. (2014). Trends in smoking among adults with mental illness and association between mental health treatment and smoking cessation. *JAMA, 311*(2), 172-182.

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D. Schroeder, S. A., & Morris, C. D. (2010). Confronting a neglected epidemic: Tobacco cessation for persons with mental illnesses and substance abuse problems. *Annual Review of Public Health*, 97, 312-314.

E. Myles, N., Newall, H. D., Curtis, J., Nielssen, O., Shiers, D., & Large, M. (2012). Tobacco use before, at, and after first-episode psychosis: A systematic meta-analysis. *The Journal of Clinical Psychiatry, 73*(4), 468-475. doi:10.4088/JCP.11r07222

[1]Current use refers to endorsing cigarette use in the last 30 days.

[2]Lifetime use describes having smoked 100 cigarettes in their lifetime.

Addressing Tobacco Cessation Specifically for Mental Health Clients

Co-occurring mental illnesses create many unique challenges that must be addressed when implementing a tobacco cessation treatment.

- As a result of a mental illness and/or psychotropic medications, many individuals experience uncomfortable and undesirable symptoms and side effects, such as anxiety and low mood. The nicotine in tobacco can often counteract these symptoms, making it harder and less desirable for a mental health patient to quit smoking (Sacco, Bannon, & George, 2004; Shiffman & Waters, 2004).
- Individuals diagnosed with a mental illness rely on their healthcare providers to help maintain both their mental and physical health. Unfortunately, many mental health providers simply fail to ask about or address smoking with their clients, as evidenced below:
    - In outpatient settings, behavioral health specialists rarely assess for smoking status (Zvolensky et al., 2005). A systematic literature review of self-reported smoking cessation counseling by primary care physicians found that about $^{2/3}$ engaged in some smoking cessation counseling via the 5 A's strategy, but most did not follow-through with all 5 A's (Bartsch, Härter. Niedrich, Brütt, & Buchholz, 2016). Specifically, 65% of physicians self-reported "Ask," 63% self-reported "Advise," 36% self-reported "Assess," 44% self-reported "Assist," and 22% self-reported "Arrange."
    - In inpatient settings, only 1% of clients were assessed for smoking status and none were assessed for nicotine dependence (Prochaska, Gill, & Hall, 2004).
    - Additionally, smoking status was not included in most treatment plans in inpatient settings (Prochaska et al., 2004).

Integrating Tobacco Cessation into Mental Health Treatment

Among mental health clients, psychiatric symptoms often become motivators for initiating or continuing smoking. Mental health providers must address smoking cessation in the context of these disorders and their associated symptomatology in order to provide appropriate and reasonable strategies to help these clients quit smoking.

Tobacco Cessation in Substance Abuse Treatment Settings

Despite decreasing rates of smoking in the general population, smoking rates remain elevated in substance abusing populations. For example, approximately 80% of poly-drug users (who use alcohol and other drugs) engaged in substance abuse treatment smoke. Like addiction to cocaine, heroin, and other illicit drugs, nicotine dependence is an addiction with significant long-term health consequences. Nicotine, the addictive component in cigarettes, once

inhaled reaches the brain faster than a drug used intravenously. This creates pleasurable and euphoric effects and in the process leads to the physical dependence. Additionally, the ritual of smoking cigarettes throughout the day becomes a habit, making it all the more difficult to quit (National Institute of Drug Abuse. Research Report on Nicotine: Addiction, August 2001).

Addressing Tobacco Cessation Specifically for Substance Use Clients

Although substance abuse and dependence is the primary concern in substance abuse treatment facilities, clients' outcomes and overall recovery can be severely impacted by concurrent tobacco use.

- Among individuals treated for alcohol dependence, tobacco-related deaths outnumbered those related to alcohol-related causes (Prochaska et al., 2004)
- Cravings for nicotine and cigarettes can also increase cravings for other drugs (Taylor et al., 2000).

Integrating Tobacco Cessation into Substance Abuse Treatment

For many years, tobacco cessation programs have not been properly integrated into substance abuse treatment because providers feared that addressing smoking would negatively impact the treatment of the client's addiction. However, research has repeatedly demonstrated that there are no adverse effects when alcohol and other substance use disorders are simultaneously addressed with cigarette smoking. In fact, addressing tobacco cessation in addiction treatment was associated with a 25% increase in the likelihood of maintaining long term abstinence from alcohol and illicit drugs (Prochaska et al., 2004). Integrating tobacco cessation is also related to a reduction in patient dropout rates in substance abuse treatment programs.

Another barrier to implementing tobacco cessation in substance abuse treatment facilities is the smoking among members of the staff. Staff members who smoke may be less likely to promote smoking cessation interventions and smoke-free facilities than those who do not smoke (Knudsen & Studts, 2010; Miyauchi et al., 2017). In addition, non-smoking staff are more supportive of implementing smoking cessation policies in their treatment facilities than their smoking counterparts (Steiner, Weinberger, & O'Malley, 2009; Williams et al., 2005). There are also many ex-smokers in substance abuse facilities who can serve as peer mentors to help support clients' quit attempts.