Assessing Staff /Patient Beliefs and Attitudes to Inform Tobacco-Free Campus Policy Implementation at Substance Use Disorder Treatment Centers

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February 2021

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The Project Team would like to thank Mary Ward, President of the Mcleod Addictive Disease Center along with her leadership team and staff for their participation, agency access and guidance in this work. We are especially grateful to the patients of the McLeod Center who participated in virtual interviews.

Abstract

In the United States, patients with behavioral health conditions have smoking rates that are two to three times higher than rates among the general population. Tobacco-free environments at substance use disorder facilities can positively impact tobacco treatment. This study assessed client and staff beliefs, attitudes and knowledge regarding the implementation of a tobacco-free campus policy at McLeod Addictive Disease Center. The McLeod Center is a full-service substance use disorder treatment facility based in Charlotte, North Carolina, with additional medication assisted treatment clinics in the region. Public health student interns of the Academy for Population Health Innovation in collaboration with Mecklenburg County Public Health worked with the McLeod Center during the 2020 COVID-19 pandemic to conduct online staff surveys (n=28) and virtual client interviews (n=38) prior to the agency going tobacco-free January 2021. Many clients expressed positive feelings associated with the policy (n=16) and reported wanting to receive tobacco quit treatment (n=25). Since the McLeod Center is one of the first *community-based* substance use disorder treatment facilities in North Carolina to transition to a 100% tobacco-free campus, the research and results could serve as a blueprint for other behavioral health facilities. Further study will include follow up surveys and interviews at 3 and 6-month intervals after policy implementation, as well as examining data collected in the electronic health record, to examine policy impact.

Keywords – tobacco-free policy; tobacco-free environments; tobacco-free behavioral health; substance use disorders; tobacco treatment; tobacco-free recovery; addressing tobacco disparities; health equity.

Introduction

In the United States, patients with behavioral health (BH) conditions have smoking rates that are two to three times higher than rates among the general population (Correa-Fernández, 2017). BH conditions include individuals with mental health or substance use disorders. BH patients who smoke will typically have a 17-year reduction in life expectancy (Huddlestone, 2018). As a result, these patients demonstrate higher death rates, increasing the cost and burden put on the healthcare system, and more importantly the human cost on decreased quality of life and longevity. BH patients tend to display smoking behaviors at a young age and incur more difficulty when trying to quit smoking compared to the general population. (e.g., Breslau, Peterson, Schultz, Andreski, & Chilcoat, 1996; Hayford et al., 1999; Hays et al., 1999; Novy, Hughes, & Callas, 2001; Richter, Ahluwalia, Mosier, Nazir, & Ahluwalia, 2002). Past smoking interventions when applied to BH patients have also shown to be less effective compared to non-behavioral health patients. This only emphasizes the need for systemic policy-level interventions at behavioral health facilities and further study to demonstrate successful tobacco treatment interventions for this high-risk population.

The 5A's (Ask, Advice, Assess, Assist, and Arrange) model of tobacco treatment has shown to be adequate and effective in treating tobacco use only when implemented correctly (Freund, 2008). Among the 5A's for tobacco treatment, assist and arrange follow-up are associated with increased quitting, but rates of assist and arrange follow-up tend to be low among healthcare providers (Park, 2015). Despite current treatment for tobacco usage (the 5A's), there is a paucity of research on adherence to these guidelines. To date, many studies have shown current healthcare treatments to be inadequate due to poor adherence to treatment guidelines. Studies have also shown that staff within mental health and addictions facilities have a higher rate of smoking, approximately 10%, which is higher than general health practitioners whose smoking rate is 4% (Cookson, 2014). As a result, BH providers who are tobacco users are less successful in providing effective smoking cessation support to patients (Johnson, 2009). We estimate conservatively that at least 30% of patients at the McLeod Center are addicted to tobacco and many of these individuals also suffer from chronic disease conditions such as COPD and have other chronic disease risk factors directly attributable to their tobacco use. Many of these patients are also among Mecklenburg county's underserved population often with low-income, no health insurance, and living in substandard housing.

Smoke-free environments at SUD facilities have the potential to positively impact tobacco treatment; however, in 2016, fewer than half of SUD treatment facilities offered evidence-based tobacco cessation treatments (Marynak, 2018). Yet, evidence has shown that policies around Tobacco Free Campuses can be effective in restaurants and worksites (Levy, 2018). Tobacco regulations and policies have found that smoking bans that were implemented can result in positive effects on health inequalities (Thomson et al, 2018). However, inconsistent tobacco-free policies increase socioeconomic inequalities already present among individuals who use tobacco (Brown et al, 2013). Due to the lack of education and understanding of the policy,

people are more likely not to abide by the voluntary rules and suggestions. When tobacco-free policies are implemented that enforce regulation in areas or certain environments then these policies help reduce certain inequalities (Brown et al, 2013). The best interventions on tobacco use within a community have come from legislated and mandated tobacco-free policies in environments along with an increase in the tobacco product prices within the community (Amos et al, 2011; Brown et al, 2018).

Social determinants of health play a vital role in tobacco related health disparities. The social determinants of health found within the areas of economic stability, education, the built environment, health care, and social and community context heavily influence tobacco-related disparities (CDC, n.d.). In the United States, individuals with lower levels of educational attainment and low socioeconomic status (SES) have higher rates of tobacco use (CDC, 2019). Not only are these individuals more likely to use tobacco products, but they are also disproportionately affected by tobacco-related diseases. Lung cancer is higher among populations that make less than $12,500, live in rural areas and individuals with less than a high school education in comparison to people that make at least $50,000, live in urban areas and obtain a college degree (CDC, 2019). Low SES populations are also more likely to be exposed to and suffer from the harmful health consequences of secondhand smoke.

The lack of integration of comprehensive tobacco control policies creates disparities in protection from secondhand smoke exposure and support for tobacco treatment. Geographic tobacco-related disparities are apparent in South and Midwest regions that provide fewer comprehensive tobacco-free laws, lower tobacco taxes, and limited tobacco control funding (CDC, n.d.). In order for tobacco users to gain the motivation and skills to quit, environments must change and eliminate current barriers that make behavior change difficult and, arguably, impossible (Calo & Krasny, 2014).

Tobacco-Free Campus policies are effective in increasing knowledge to address tobacco treatment among behavioral health workers (Garey, 2019). There is also supporting evidence of positive tobacco cessation outcomes when BH facilities implement Tobacco-Free Campus policies (Pagano, 2015). Despite national guidelines addressing tobacco use in healthcare settings, smoking is often overlooked among SUD treatment facilities, partially because smoking is considered a lower priority in comparison to other substances and due from fear that quitting while in recovery may jeopardize sobriety (Fuller, 2007). However, a meta-analysis of 24 studies conducted between 2006 and 2016 determined that quitting smoking and tobacco cessation treatment interventions often produced a positive impact or no impact on substance use outcomes (McKelvey, 2017). In fact, another meta-analysis examining 19 smoking cessation interventions found a 25 percent increased likelihood of long-term abstinence from alcohol and illicit drugs among tobacco use interventions offered during substance use treatment (Prochaska, 2004). In New York, a five-year evaluation of a statewide tobacco-free policy for SUD treatment facilities showed a decline in smoking prevalence among staff workers (35 percent in 2008 to 22 percent in 2013) and a decline in cigarettes smoked per day among clients (13.7 in 2008 to 10.2 in 2013) (Pagano, 2015). Studies show that incorporating tobacco-related education sessions in

conjunction with the adoption of Tobacco-Free Campus policy is effective in increasing knowledge to address tobacco treatment among behavioral health workers (Garey, 2019).

In 2019 Mecklenburg County Public Health located in Charlotte, North Carolina, committed to addressing this health disparity and equity issue through development of a Change for Life: Tobacco-Free Recovery Coalition of community-based BH agencies. Guided by tobacco control best practices and lessons from national partners, MCPH sought to convene local partners to explore readiness and action for transitioning BH agencies to a tobacco-free culture of care. McLeod Addictive Disease Center served as an early adopter pilot with commitment to implementing a January 2021 Tobacco-Free Campus Policy, tobacco-free communications and ongoing tobacco treatment integration.

Understanding outcomes related to integration of tobacco treatment and Tobacco-Free Campus policy implementation at the McLeod Addictive Disease Center can: 1) target populations in need; 2) improve access to services and delivery; 3) improve allocation of healthcare resources; and 4) reduce healthcare costs. This research also can reduce behavioral health patient's mortality and prevent co-morbidities, improving health outcomes for behavioral health patients.

Study Purpose

The purpose of this study is to examine the beliefs and attitudes towards the implementation of a Tobacco-Free Campus (TFC) policy at the McLeod Addictive Disease Center, a Substance Use Disorder (SUD) treatment facility, and disseminate results to other SUD organizations. We use survey and virtual interview data to analyze demographics and assess the desirability of a TFC policy among SUD clients and employees.

Methods

Study Population

The McLeod Addictive Disease Center is a Charlotte, North Carolina-based community non-profit working since 1969 to provide quality behavioral health services to adults over the age of 18. They currently serve an average of 3,900 patients daily who have a primary diagnosis of substance use disorder in 9 locations across Piedmont and Western North Carolina The facilities are located in Charlotte, Concord, Gastonia, Hickory, Lenoir, Marion, Monroe, and Statesville. In calendar year 2020, McLeod served a total of 6,599 unduplicated patients. Offering a menu of behavioral health services, Mcleod employs a variety of staff ranging from case managers, nurses, substance abuse counselors/clinicians, management positions, data entry, and many more. The facilities all offer medication assisted treatment services (MAT) to their clients while the main facility offers residential services, outpatient treatment, education programs, and case management. The outpatient treatment services range from short term, long term, and intensive

services. Outpatient services can range from 20 hours to 90+ depending upon the services. The MAT services offered at each of the centers is a combination of medications approved by the Food and Drug Administration (FDA) in conjunction with behavioral therapies (McLeod Addictive Disease Center, 2018). Typically, the MAT services are utilized for patients that are experiencing opioid dependence (McLeod Addictive Disease Center, 2018). Case management services allow clients to meet regularly with their designated case manager and learn about allocated resources, specific provisions associated with their treatment, and any court mandated requirements (McLeod Addictive Disease Center, 2018). Another service offered by the McLeod Center are the drug education programs. These programs educate clients on anger management, conflict resolution, and improving their decision-making skills (McLeod Addictive Disease Center, 2018). The drug education program is a form of cognitive behavior intervention and clients have to be referred in order to participate in these services.

Materials and Methods

The Academy for Population Health Innovation (APHI) is a public health academic partnership between the University of North Carolina Charlotte (UNCC) and MCPH. This project was identified as a priority in the APHI pipeline allowing APHI staff to facilitate and engage students in the project. The research study used structured, virtual interviews (n=38) and two online employee surveys: May (n=134); August (n=28). Client interviews and the employee survey were conducted between May and November 2020. The authors of the study developed the interview and survey questions utilizing existing literature and input from the community partner, the Tobacco Prevention & Control Program of Mecklenburg County Public Health (MCPH). The Tobacco Prevention & Control Program supervisor reviewed and edited the interview and survey guides. Participants were eligible for the study if they worked or were treated at the McLeod Center. Participants were excluded from the study if: (1) their primary language spoken was not English or Spanish; (2) they suffered from a severe cognitive impairment that limited their ability to participate; (3) or they had a life-threatening medical condition. Interviews were conducted virtually as a result of the current COVID-19 outbreak. The virtual interviews required participants to have access to HD Meetings, which was the McLeod Center approved telehealth service. The telehealth services offered during the study maintained compliance with the Health Insurance Portability and Accountability Act (HIPAA) and CFR 42 part 2. Participants were recruited for the client interview through word of mouth, primarily conducted through the McLeod Center staff. Participants were recruited for the employee survey through word of mouth which included the distribution of a company-wide email sent from the President of the McLeod Center. The Institutional Review Board (IRB) approved all procedures.

Client interviews were conducted virtually in private rooms located at one of the seven participating McLeod Center locations (Charlotte MAT, Charlotte Residential, Concord MAT,

Hickory MAT, Lenoir MAT, Marion MAT, and Monroe MAT). Interviews lasted approximately 15 minutes and focused on participant demographic characteristics (age, gender, race/ethnicity, education, and current tobacco status) and beliefs and attitudes toward the Tobacco-Free Campus (TFC) policy. Employee survey questions were conducted using SurveyMonkey. Survey questions focused on employee demographics, including current tobacco use status, and employee sentiments and attitudes towards the TFC policy. There was no monetary compensation provided to participants.

Results

McLeod Center Client Interviews

The majority of clients interviewed were female (63%), younger than 55 (84%) and non-Hispanic white (92%), followed by non-Hispanic black (8%) (Table 1). The use of tobacco products, which included cigarettes, cigars, cigarillos, pipes, vapes, E-cigarettes, E-Juice, JUUL, hookah, vape pens, dip, snuff, snus, and/or IQQS, was reported by 92% of clients. The majority of clients reported not being bothered by secondhand smoke while on the McLeod Center premises (82%), and 74% of clients that were current tobacco users reported interest in receiving tobacco-quit treatment from the McLeod Center in the future.

Table 1. Characteristics of McLeod Center clients from the 2020 client interviews (N=38).

Variables	**N**	**%**
Location site		
Charlotte MAT	2	5.1
Charlotte Residential	8	20.5
Concord MAT	7	17.9
Hickory MAT	5	12.8
Lenoir MAT	8	20.5
Marion MAT	5	15.4
Monroe MAT	3	7.7
Gender		
Male	14	36.8
Female	24	63.2
Age		

25-34	15	39.5
35-44	8	21.1
45-54	9	23.7
55-64	6	15.8
Race/ethnicity		
Non-Hispanic White	35	92.1
Non-Hispanic Black	3	7.9
Education		
Less than high school	8	21.1
High school graduate	17	44.7
Some college	9	23.7
College graduate	4	10.5
Tobacco use		
Yes	35	92.1
No	3	7.9
Bothered by secondhand smoke		
Yes	7	18.4
No	31	81.6
Tobacco quit treatment		
Yes	25	73.5
No	9	26.5

Client Beliefs and Attitudes Around the TFC Policy

Many clients expressed positive feelings associated with the policy (n=16) when asked the question "How do you feel about the Tobacco-Free Campus policy?"

"I personally think it's a really good idea, and the only reason I say that is because it is a treatment center. If you are a drug addict, and you are receiving treatment it is not beneficial to be smoking cigarettes with other drug addicts. You do not have to hang out at the McLeod Center and smoke cigarettes." (Concord, female, 25-34 years).

"I think it is a good idea to be honest with you because it will be a good idea to go twenty-eight days with no tobacco. It would be a good way to quit." (Charlotte, male, 25-34 years).

"To be honest with you, I was hoping that it was tobacco free before I came because I was going to try and quit smoking, so if no one else was smoking it would have made it easier." (Charlotte, male, 55-64 years).

Other clients expressed negative feelings associated with the policy (n=9) and the remaining clients either weren't sure or expressed neutral feelings towards the policy (n=13).

"I don't really care for it. I think that in my opinion if you know it's a tobacco free campus there should be an area to smoke for people. I shouldn't be judged or discriminated against for using tobacco." (Monroe, male, 25-34 years).

"I think it is going to be a negative thing because smoke is a stress reliever when coming off drugs. It's going to be a bad thing right off hand, but people will get used to it. Smoking helps in stressful situations - yesterday I had grief counseling: my mom died and I cried all the time and smoked to relieve stress." (Charlotte, male, 35-44 years).

"Being a smoker, I don't like it. I enjoy sitting outside and smoking to socialize." (Marion, female, 45-54 years).

Some clients provided suggestions and expressed concerns associated with the TFC policy when asked the question "Do you have any thoughts, suggestions or concerns about the Tobacco-Free Campus policy?" The most frequently provided suggestion consisted of incorporating a designated smoking area (n=6). Some clients provided the following responses to thoughts, suggestions and/or concerns with the policy:

"I have the concern of causing more stress when people are in a vulnerable state. Cigarettes are an outlet - a breath of fresh air. That's just my opinion." (Charlotte, male, 25-34 years).

"I feel like if a person does not smoke, I'm not saying they should not be outside, but there needs to be a way to appease both parties. People are coming off of drugs, nicotine, and alcohol, and they need something to help with that and do something with their hands sometimes." (Charlotte, female, 45-54 years).

"To be honest, I think it would work here only because it's a small place so of course everybody was able to change with the COVID practices pretty quickly. Bigger campuses I'm not so sure." (Lenoir, female, 35-44 years)

The average response to the question "On a scale of 1-10, with 1 being not at all and 10 being very much, how much do you believe the Tobacco-Free Campus policy will positively impact your overall substance use recovery?" was 6. According to some respondents, the implementation of a TFC policy would have a positive impact on their overall substance use recovery. Respondents provided the following responses for why they believed the policy would have a positive impact on their long-term substance use recovery:

"*I think it will be a good thing because us substance abuse people go to tobacco as a gateway, so I think it will be good for us to not have that as a gateway."* (Lenoir, female, 25-34 years).

"*I was told when I started my recovery either be in it 100% or not be in it for it to work. We don't consume alcohol or bad things in our body like medication and stuff, and I think it would help with it being a tobacco free area. I think that it would help with trash, people throw their cigarettes out. I think it would also make it look a lot better around here."* (Lenoir, female, 35-44 years).

"It will make me more positive to want to commit to my recovery here at the McLeod Center. Once we step out these doors, once we're through with our business at the McLeod, people go light up a smoke. For one thing, there's secondhand smoke, if I could just get no-hand smoke, I would feel more positive that it would help other clients." (Lenoir, female, 45-54 years).

"*Some people need that push to quit smoking. Some people need to stop smoking in order to stop getting high."* (Monroe, male, 25-34 years).

"It is hard to see someone smoking or smell smoke. It makes me want a cigarette. I am sure that happens to other people and hopefully it will help other people not want a cigarette when walking through the door. You won't be tempted to go and smoke with your buddies." (Concord, female, 25-34 years).

"*I've always looked at it like smoking is the last thing is the hardest thing to break away from. Completing one substance gives you confidence to break off from the second substance."* (Concord, male, 25-34 years).

Other respondents reported the implementation of a TFC policy would have a negative impact on their overall substance use recovery. Respondents provided the following responses for why they believed the TFC policy would have a negative impact on their long-term recovery:

"*Because smoking doesn't have anything to do with my recovery"* (Monroe, female, 55-64 years).

"*Will make things harder for people to get off drugs. I was on cocaine, others were on opioids, don't want to hurt them. It's going against the grain."* (Charlotte, male, 35-44 years).

"*When you're a substance user and you go off that substance you can still have the comfort of a cigarette or whatever you use. It gives you that calming feeling because this can be a very tense situation."* (Charlotte, female, 44-55 years).

"*Because people are in a vulnerable state and sometimes cigarettes sooth people and let you get a breath of fresh air. Quitting one thing is hard enough."* (Charlotte, male, 25-34 years).

"Mainly it will just keep me from smoking while I am here on campus." (Lenoir, female, 44-55 years).

"Smoking keeps my triggers down." (Lenoir, male, 25-34 years).

Transitioning to a Tobacco Free Campus

Many clients provided suggestions for transitioning the McLeod Center to a tobacco free campus. The most frequent response was policy communications (n=14), followed by monitoring and enforcing the policy (n=4), and incorporating a gradual implementation (n=3).

"Introduce it slowly; create a policy with phases." (Hickory, female, 25-34 years).

"Just slowly start less smoke breaks." (Charlotte, male, 25-34 years).

"If it's not already, it needs to be posted in the lobby and on doors. I've known for years that you could smoke, so I came in knowing you could smoke. So it could be a problem for someone expecting to smoke on January 1." (Charlotte, female, 44-55 years).

"Be stern about the policy and put up signs about no tobacco use." (Monroe, male, 25-34 years).

McLeod Center Employees

There were 210 employees reported by McLeod Center management in June 2020 (Table 2). The majority of employees were female (81%) and non-Hispanic white (58%), followed by male (19%) and non-Hispanic black (37%). The mean age for male employees was 47 years and 43 years for females.

Table 2. Characteristics of McLeod Center staff employed in 2020 (N=210).

Variables	N	%
Gender		
Male	171	81.4
Female	39	18.6
Age		
Male	39	47
Female	171	43
Race/ethnicity		
Non-Hispanic White	121	57.6
Non-Hispanic Black	79	37.2
Hispanic	6	2.9
Other	4	1.9

McLeod Center Employee Survey (May)

There were 134 employees that participated in the one question survey administered in May 2020 (Table 3). Based on the survey results, 56% employees never smoked or used tobacco products (including electronic cigarettes), 32% of employees were former users and 11% of employees were tobacco current users.

Table 3. Characteristics of McLeod Center staff from the May 2020 survey (N=134).

Variables	N	%
Tobacco Status		
Never used	77	57.5
Former user	43	32.1
Current user	14	10.5

McLeod Center Employee Survey (August)

The majority of employees that participated in the online survey had been employed with the McLeod Center longer than a year (84%), were female (74%), non-Hispanic white (81%), and had obtained a college degree (81%) (Table 4). The use of combustible tobacco products (cigarettes, cigars, cigarillos, pipe and/or hookah) were reported by 11% of employees and non-combustible tobacco products (E-cigarettes, electronic cigars, electronic cigarillos, electronic hookah, chewing tobacco, dip, snus, vaporizers, and/or vape pens or IQOS) were reported by 7% of employees. Secondhand smoke exposure while at work reportedly bothered 37% of employees. When asked the question "If the McLeod Center continues to offer telehealth services after January 1, 2021, do you see any challenges to offering virtual tobacco use treatment?", 15% of employees reported yes.

"*We do need more tablets at the clinics. Sometimes one is not enough, and we have clients waiting to use, especially with intakes."*

"*Although it would be a telehealth service, there could remain individuals who may want to take advantage of this treatment; to address their tobacco use if efforts improve health and save money. If the virtual tobacco treatment may not be attractive to all, however if we can benefit a portion of people then that is a plus."*

"*People will still smoke"*

"Other tobacco users in the home."

The majority of employees did not believe clients would be accepting or strongly not accepting of the TFC policy (64%), followed by accepting (18%) and neither accepting nor not accepting (18%). The majority of employees believed the TFC policy would positively impact clients overall SUD recovery (64%); however, 18% of employees did not believe the TFC policy would positively impact clients overall SUD recovery.

Table 4. Characteristics of McLeod Center staff from the August 2020 survey (N=28).

Variables	**N**	**%**
Employment duration		
Less than 1 year	4	14.8
1-2 years	7	25.9
3-4 years	4	14.8
4-5 years	5	18.5

More than 5 years	7	25.9
Gender		
Male	5	18.5
Female	20	74.1
Age		
18-24	1	3.9
25-34	5	19.2
35-44	7	26.9
45-54	8	30.8
55-64	5	19.2
Race/ethnicity		
Non-Hispanic White	22	81.5
Non-Hispanic Black	2	7.4
Hispanic	1	3.7
Education		
Some college	3	11.5
Associate degree	2	7.7
Bachelor degree	6	23.1
Master degree	15	57.7
Combustible tobacco use		
Yes	3	11.1
No	24	88.9
Non-combustible tobacco use		
Yes	2	7.1
No	26	92.9
Bothered by secondhand smoke		
Yes	10	37.0
No	17	63.0

Virtual tobacco use treatment challenges		
Yes	4	14.8
No	23	85.2
TFC policy will positively impact client SUD recovery		
Strongly agree	12	42.9
Agree	6	21.4
Disagree	2	7.1
Strongly disagree	3	10.7
Neither agree nor disagree	5	17.9
Client acceptance of TFC policy		
Strongly accepting	0	0
Accepting	5	17.9
Not accepting	13	46.4
Strongly not accepting	5	17.9
Neither accepting nor not accepting	5	17.9

Employee Belief and Attitudes Around the TFC Policy

Many employees expressed concerns and/or hesitation associated with the TFC policy, which included clients being resistant to change, frustrated with the policy, and clients potentially seeking services at other SUD organizations that did not have a TFC policy. Some employees provided the following responses to their thoughts, suggestions and/or concerns with the policy:

"I think that it is good for us being viewed as a medical facility, but I feel that patients will continue to use tobacco when off campus."

"I worry about Anuvia {a community-based treatment facility} ynot launching when we do, so clients who wish to smoke will choose to go there instead."

"It will be a deterrent for patients to utilize our services and they will seek treatment elsewhere. As a whole, trends are moving towards less restrictive attitudes in relation to substance use. In particular, use of those substances without immediate and severe health impacts."

"There will likely be resistance as with any change."

"I believe it will place a lot of stress on the patients which will cause the patients to take their frustration out on staff."

"I believe that it will be highly ineffective, and employees will be tempted to sneak a smoke break in the bathrooms."

Some employees expressed positive sentiments towards the TFC policy, which included an overall benefit to employees and long-term SUD recovery for clients. These employees provided the following responses to their thoughts, suggestions and/or concerns with the policy:

"I believe the implementation of this policy is beneficial in assisting the clients in improving their opportunity for sobriety as many associate tobacco smoking with their drug use. I imagine there will be some, initial, discomfort for both staff and clients through the transitional period, however, this is an overall healthy measure to take."

"Smoking is the leading cause of preventable death in the U.S., causing over 480,000 deaths per year. I'm glad we finally took a stand."

"I'm excited to be a part of McLeod Center at this important milestone, and I see the tobacco free policy as essential to the interests of staff, clients and the agency overall."

Employees frequently reported clear policy communications (n=6), employee and client participation (n=3), and employee support (n=2) to be salient factors in leading a successful policy implementation. Employees provided the following responses when addressing factors they believed to lead to successful policy implementation:

"Participation by all."

"If everyone participates and leads by example."

"A high percentage of buy-in from staff will be valuable, along with unwavering commitment from leadership to stay the course. It is essential that staff demonstrate empathy in their interactions with one another and with clients and their partners/families."

"Handouts to give clients, giving clients warnings, clear boundaries about where campus starts and ends."

"Making it clear to all staff and clients with signs."

Discussion

Overall, the majority of the clients interviewed were not able to identify that there is a connection between the impact of tobacco use on their overall long-term substance use recovery.

Most clients believed that utilizing tobacco products while simultaneously receiving treatment for their dependence on another substance will improve their ability to maintain abstinence. Clients are unaware of their dependence on tobacco products because they rely on these products for stress relief and comfort when they are experiencing withdrawals from other substance dependence. It was apparent throughout the interviews that the primary facility that will experience the most pushback once the Tobacco-Free Campus policy is implemented is the residential treatment program located in Charlotte. Since this facility requires clients to receive in-patient treatment for twenty-eight days, these clients would be required to stop using tobacco and all other substances for the duration of their treatment. The other facilities only offer outpatient services; therefore, their clients can leave the campus and partake in tobacco use if they please. Staff members are also hesitant about the transition to a tobacco-free campus. Some staff members expressed worries about clients choosing other facilities over the McLeod Center if SUD treatment facilities in the local area do not transition to tobacco free soon. They believe that there will be resistance from clients because this is uncharted territory and that receiving pushback from the policy will be inevitable.

Some of the clients have indicated that transitioning to a tobacco-free campus would benefit their overall substance use recovery. They understand that utilizing tobacco during their treatment only increases their dependence on tobacco during the recovery process. Some clients realize that since they are receiving treatment for a substance use disorder it is not consistent to utilize tobacco products since it is an addictive drug. Although the client's responses varied as far as whether or not they supported the TFC policy, it was made clear that the McLeod Center must be transparent during the implementation process. In order to alleviate major pushback from clients at the various facilities, they should be kept informed on the implementation of the policy and any updates. This could be done by creating appropriate signage and other communications for the lobby of the center and throughout the facility. Also, sending out messaging via email or text to remind clients about the policy and future updates.

With any research study there are potential limitations and strengths associated with this study. Due to the ongoing COVID-19 pandemic, the interviews were conducted via HD Meeting which is the telehealth platform utilized by the McLeod Center. During the interviews, there were times where the interviewer could not see the interviewee, or the connection lagged on responses. Unstable connection caused the interviewee to have to repeat their answers to the interviewer and could have also resulted in the interviewer missing or misreporting the information provided. There is potential for interview bias to have occurred due to the interviewers being aware of the interviewee's smoking status throughout the interview. This may result in the interviewer asking questions in a different tone and/or context to smokers as compared to non-smokers.

Potential strengths for this study are that the results obtained could be applied to other treatment facilities in North Carolina. Since the McLeod Center is one of the first community-based substance use disorder treatment facilities to transition to a tobacco-free campus, the research and results could serve as a blueprint for other facilities that will be transitioning soon.

These facilities have the opportunity to review the information provided by clients and staff at the McLeod Center and implement these suggestions at their centers before they transition to tobacco-free. Future research should investigate how clients perceive the TFC policy after the implementation process is complete, ideally six to twelve months after the policy has been implemented to evaluate how clients perceive the policy and how it is impacting client's overall substance use disorder recovery.

Conclusion ------ Based on existing best practice tobacco control literature and on the findings from Mcleod Center surveys and interviews, the following recommendations are provided for implementing a Tobacco-Free Campus policy in a BH setting:

- Develop and ensure clear communications about a TFC policy, *prior to* implementation and ongoing after policy effective date to staff, patients and visitors (start early to let all know)
- Ensure prominent and clear TFC Policy signage on the campus
- Recognize that the majority of BH patients who use tobacco have a desire to quit and want tobacco dependence treatment
- Build capacity among staff for providing and linking to best practice tobacco dependence treatment, including counseling and quit medications as well as acknowledgement that a TFC policy is part of that treatment
- Provide comprehensive training to staff on policy implementation and tobacco treatment
- Build in motivational messaging that there is a connection between quitting tobacco use and increased success of long-term recovery/sobriety
- Build in strong interventions that help patients develop healthy strategies for dealing with stress and anxiety and do not include reliance on tobacco use
- Explore repurposing of smoking areas to become healthier areas for socializing/wellness
- Build in consistent strategies for adherence to (enforcement of) the policy for all on campus
- Build tobacco intervention prompts ("tobacco tab") into electronic health records (EHR) to allow for robust data collection (i.e. tobacco use assessment, 5 A's, health related status etc.)
- Reassess patient and staff attitudes/beliefs about the policy and its impact at 3 months, 6 months and 1 year after policy effective date and readjust according to findings.

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