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Editorial

Non-pharmacological Treatments for Tobacco Users With Mental Health Symptoms

People with mental health conditions (MHCs) face significant disparities related to cigarette smoking¹ including higher prevalences of smoking^{2,3} and lower quit rates (eg,^{2,4,5}). Critically, while smoking prevalence has declined among adults without MHCs in recent decades, this same decline has not been seen in people with MHCs.^{6,7} Individuals with substantial mental health symptoms or diagnoses are generally excluded from studies on tobacco use, including treatment studies, despite the fact that 35.6% of adults with MHCs in the United States report current smoking.³ This exclusion is compounded by the fact that the relatively few treatment studies that do focus on this population primarily examine pharmacological treatments, resulting in a dearth of knowledge about efficacious and effective non-pharmacological interventions for this vulnerable population.

The current issue of *Nicotine & Tobacco Research* includes four articles examining four different non-pharmacological approaches to addressing tobacco use in individuals who smoke cigarettes and have MHCs: an experimental study examining a transdiagnostic factor associated with tobacco use, a systems approach aiming to influence a behavioral health system, a pilot study of a tailored quit line, and an evaluation of a large public health campaign.

Farris et al.⁸ examined the relationship between distress intolerance and smoking reinforcement in a laboratory paradigm. Regardless of physiological stress exposure, higher distress intolerance was associated with greater increases in smoking reinforcement (as measured by puff volume during ad libitum smoking). Additionally, physiological distress resulted in consistent puff volumes in smokers with higher distress intolerance and slowly reducing puff volumes over time in smokers with lower distress intolerance. Farris et al. propose that this pattern of response may be indicative of a tendency of those with higher distress intolerance to smoke in order to cope with distressing states, which, in turn, may sustain dependence on cigarettes through negative reinforcement. Overall, this work suggests that distress intolerance is a promising therapeutic target for cessation interventions.

Building on the work of John Slade et al.,⁹ Flitter et al.¹⁰ describe a cluster-randomized trial of a systems approach to increasing tobacco dependence treatment in behavioral health settings as compared to “usual care.” Preliminary data suggest that it is feasible to conduct such a study and that such work is sorely needed: while 59% of clients wanted tobacco treatment, fewer than half of treatment staff felt that tobacco dependence treatment was part of their agencies’ role and only 35.6% felt that it was part of their own role. This work is important in identifying barriers to improving the clinical treatment of tobacco use within community mental healthcare.

Carpenter et al.¹¹ conducted a pilot study comparing an enhanced, tailored quitline program for smokers with MHCs to a standard quitline program, to examine feasibility and acceptability of the tailored program. Early results were promising in that smokers with MHCs in the tailored intervention completed nearly twice as many calls and were more likely to accept shipments of nicotine replacement therapy as compared to those with MHCs in the standard quitline program. Seven-month abstinence rates were similar between groups; however, though the relatively small sample size in the tailored intervention group and unequal follow-up response rates make interpretation difficult. This study suggests that tailored quitlines have potential for engaging smokers with MHCs and warrant larger-scaled investigations.

Finally, Prochaska et al.¹² conducted a two-wave longitudinal online survey to evaluate anti-smoking ads featuring a former smoker with depression (part of the Tips From Former Smokers campaign) in smokers with and without MHCs. Targeting smokers with depression proved worthwhile because greater exposure to ads featuring the former smoker with depression was related to higher odds of intending to quit smoking and with actual quit attempts in smokers with MHCs, whereas non-targeted campaigns were associated with quit attempts among smokers without MHCs but not for those with MHCs. These findings indicate that it is important to feature people with MHCs in tobacco control media campaigns.

While this themed section demonstrates that multiple non-pharmacological approaches are promising for addressing the disparity of tobacco use among individuals with MHCs, the process of creating this themed section demonstrated to these writers the paucity of ongoing research in this area. The aim of the themed section was to bring together the most recent research on non-pharmacological treatments or laboratory investigations for tobacco users with MHCs, with an expected emphasis on psychosocial treatments. Submissions focusing on symptoms related to a range of psychiatric disorders (eg, mood, anxiety, psychotic, substance use) and nicotine/tobacco products (including electronic cigarettes) were encouraged.

We put out a call for submissions in February 2018, and despite fairly widespread advertising and multiple extensions of the original deadline, we received relatively few submissions and even fewer related to psychosocial interventions. What was initially conceived of as themed issue therefore became a themed section. We believe the difficulty we experienced in soliciting relevant manuscripts makes our original point about the dearth of research on this topic. In addition, several of the submissions were at very early pilot stages of development, once again highlighting the need for support to move non-pharmacological research forward through the stages

of treatment development research. The Tobacco Control Research Priorities Working Group of the National Cancer Institute (NCI) listed the development of novel behavioral interventions as one of the top priority areas for the next 10 years of tobacco research with a specific need noted for this work to consider mental health status.¹³ We call on the National Institutes of Health and other major funding agencies around the globe to prioritize funding for research to examine non-pharmacological tobacco dependence approaches for smokers with mental health symptoms.

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Declaration of Interests

None declared.

References

- Williams JM, Steinberg ML, Griffiths KG, Cooperman N. Smokers with behavioral health comorbidity should be designated a tobacco use disparity group. *Am J Public Health*. 2013;103(9):1549–1555.
- Smith PH, Mazure CM, McKee SA. Smoking and mental illness in the U.S. population. *Tob Control*. 2014;23(e2):e147–e153.
- CDC. Vital signs: Current cigarette smoking among adults aged ≥18 years with mental illness — United States, 2009–2011. *MMWR Morb Mortal Wkly Rep*. 2013;62(5):81–87.
- Weinberger AH, Kashan RS, Shpigel DM, et al. Depression and cigarette smoking behavior: a critical review of population-based studies. *Am J Drug Alcohol Abuse*. 2017;43(4):416–431.
- Streck JM, Weinberger AH, Pacek LR, et al. Cigarette smoking quit rates among persons with serious psychological distress in the United States from 2008–2016: Are mental health disparities in cigarette use increasing? *Nicotine Tob Res*. 2018. doi:10.1093/ntr/nty227
- Szatkowski L, McNeill A. Diverging trends in smoking behaviors according to mental health status. *Nicotine Tob Res*. 2015;17(3):356–360.
- Steinberg ML, Williams JM, Li Y. Poor mental health and reduced decline in smoking prevalence. *Am J Prev Med*. 2015;49(3):362–369.
- Farris SG, Aston ER, Leyro TM, Brown LA, Zvolensky MJ. Distress intolerance and smoking topography in the context of a biological challenge. *Nicotine Tob Res*. 2018. doi:10.1093/ntr/nty167
- Hoffman AL, Kantor B, Leech D, et al. *Drug Free is Nicotine Free: A Manual for Chemical Dependency Treatment Programs*. New Brunswick, NJ: Tobacco Dependence Program; 1997.
- Flitter A, Lubitz SF, Ziedonis D, et al. A cluster-randomized clinical trial testing the effectiveness of the Addressing Tobacco Through Organizational Change (ATTOC) model for improving the treatment of tobacco use in community mental healthcare: Preliminary study feasibility and baseline findings. *Nicotine Tob Res*. 2018. doi:10.1093/ntr/nty239
- Carpenter KM, Nash CM, Vargas-Belcher RA, Vickerman KA, Haufle V. Feasibility and early outcomes of a tailored quitline protocol for smokers with mental health conditions. *Nicotine Tob Res*. 2019.
- Prochaska J, Gates E, Davis K, Gutierrez K, Hunt Y, Rodes R. The 2016 tips from former smokers® campaign: associations with quit intentions and quit attempts among smokers with and without mental health conditions. *Nicotine Tob Res*. 2018. doi:10.1093/ntr/nty241
- Tobacco Control Research Priorities Working Group of the NCI Board of Scientific Advisors, Tobacco Control Research Priorities for the Next Decade: Working Group Recommendations for 2016 - 2025. National Cancer Institute; 2016. <https://cancercontrol.cancer.gov/brp/tcrb/documents/NCI-Tobacco-Control-Research-Priorities-Report.pdf>. Accessed February 1, 2019.