

Meadows Mental Health Policy Institute

Tobacco Use Prevalence Among People with Serious Mental Illnesses

Overview of Findings

In November, 2017, MMHPI conducted a brief literature review of epidemiological studies that estimated the prevalence of tobacco use among adults with serious mental illnesses (SMI). Serious mental illnesses include diagnoses of schizophrenia, bipolar disorder, major depression, and other conditions, accompanied by significant role impairment across several life domains. This brief paper summarizes the findings that were drawn from important meta-analyses (summaries of studies), seminal studies, and authoritative sources.

Studies of tobacco use among people with mental illnesses and substance use disorders have predominantly used cigarette smoking as the primary metric. While the Centers for Disease Control (CDC) estimated the prevalence rate of smoking among adults with any mental illness to be 36%,¹ studies of smoking prevalence rates among adults with SMI have reported estimates of 44% to 64%.^{2, 3, 4}

In 2015, the CDC indicated smoking prevalence among the general population of adults was 15%.⁵ Mental illness is therefore a very significant risk factor for smoking: those with any mental illness have more than double the smoking prevalence found in the general population, and those with SMI have three to four times the prevalence. From a study conducted in eight states (including Texas), we also know that, on average, adults with SMI have life expectancies that are about 25 years shorter than the rest of the adult population.⁶

¹ Centers for Disease Control. (2013). Vital signs: Current cigarette smoking among adults aged ≥18 years with mental illness—United States, 2009-2011. *Morbidity and Mortality Weekly Report* 62(5), 81-87.

² Dickerson, F., Stallings, C. R., Origoni, A. E., Vaughan, C., Khushalani, S., Schroeder, J., & Yolken, R. H. (2013). Cigarette smoking among persons with schizophrenia or bipolar disorder in routine clinical settings, 1999–2011. *Psychiatric Services*, 64(1), 44–50.

³ McClave, A. K., McKnight-Eily, L. R., Davis, S. P., & Dube, S. R. (2010). Smoking characteristics of adults with selected lifetime mental illnesses: Results from the 2007 National Health Interview Survey. *American Journal of Public Health*, 100(12), 2464–2472. <https://doi.org/10.2105/AJPH.2009.188136>

⁴ Swarbrick, M. A., Cook, J. A., Razzano, L. A., Jonikas, J. A., Gao, N., Williams, J., & Yudof, J. (2017). Correlates of Current Smoking Among Adults Served by the Public Mental Health System. *Journal of Dual Diagnosis*, 13(2), 82–90. <https://doi.org/10.1080/15504263.2017.1296603>

⁵ Centers for Disease Control. Retrieved on November 10, 2017, from <https://www.cdc.gov/tobacco/campaign/tips/resources/data/cigarette-smoking-in-united-states.html>

⁶ Colton, C.W., & Manderscheid, R.W. (2006). Congruencies in increase mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. *Preventing Chronic Disease*, 3(2), 1-14.

Historical Trends in Smoking Prevalence Among People with SMI

A meta-analysis of studies conducted between 1984 and 2004 examined the association between cigarette smoking and schizophrenia, a serious mental illness.⁷ The smoking prevalence rate ranged from 51% to 85% for individuals with schizophrenia within inpatient settings in the United States (six studies, n = 1,020), and from 61% to 88% for individuals with schizophrenia in US outpatient settings (six studies, n = 1,565). Additionally, among a very large and diverse sample of consumers receiving psychiatric outpatient services (n = 2,774), researchers examined the independent relationship between smoking and serious psychiatric conditions.⁸ Controlling for all other substance use, the smoking prevalence was 63% among people with schizophrenia and 51% to 67% across other conditions, including anxiety disorders, depression, bipolar disorder, and schizoaffective disorder.

Smoking cessation interventions did not start to gain traction as a component of outpatient psychiatric care until the late 1990s and early 2000s. Since then, evidence-based smoking cessation interventions have been developed and manualized, and it is likely that a slight reduction in the prevalence of cigarette smoking among those with SMI has resulted. Nevertheless, the estimated rates of smoking among this population remains high. For example, results from the 2007 National Health Interview (n = 23,939) indicated that the age-adjusted smoking prevalence among adults with schizophrenia was 59%, and 46% among those with bipolar disorder.³ Similarly, in a sample of psychiatric patients with schizophrenia or mood disorders (n = 547), 64% of those with schizophrenia and 44% of those with bipolar disorder were identified as current smokers.²

Overall, these findings from the past few decades suggest that smoking remains a significant health concern for individuals with diagnosable mental illnesses, especially those with SMI. Research and policy efforts should continue to explore smoking cessation treatments and interventions that are most effective for people living with SMI.

⁷ de Leon, J., & Diaz, F. J. (2005). A meta-analysis of worldwide studies demonstrates an association between schizophrenia and tobacco smoking behaviors. *Schizophrenia Research*, 76(2–3), 135–157. <https://doi.org/10.1016/j.schres.2005.02.010>

⁸ Vanable, P. A., Carey, M. P., Carey, K. B., & Maisto, S. A. (2003). Smoking Among Psychiatric Outpatients: Relationship to Substance Use, Diagnosis, and Illness Severity. *Psychology of Addictive Behaviors : Journal of the Society of Psychologists in Addictive Behaviors*, 17(4), 259–265. <https://doi.org/10.1037/0893-164X.17.4.259>