Sarret Seng, BA & Chizimuzo TC Okoli, PhD, MPH, MSN, RN
University of Kentucky College of Nursing, Lexington KY; Eastern State Hospital, Lexington, KY

INTRODUCTION

- Smoking rates among people with mental illnesses (MI) are disproportionately higher than the general population (Prochska, Das, & Young-Wolff, 2017).
- Factors associated with tobacco use include being male, American Indian/Alaskan Native, lower education status, being from the Midwest and South, using other substances, living in an area without smoke-free policies, and being between 24-44 years of age (Centers for Disease Control and Prevention, 2013; Jamal et al., 2018).
- Examining correlates of tobacco use can strengthen continuity of tobacco treatment for people with MI.
- The purpose of our study was to determine variables associated with tobacco use among people with MI, and to examine differences by MI diagnoses categories. The specific aims of our study were to examine: 1) correlates of tobacco use, and 2) correlates of tobacco consumption.

METHODS

Procedure

- We examined the charts of patients admitted to a state psychiatric facility between January 1st to December 31st, 2016.

Measures		
Measurement	**Description**	**Source**
Demographics	Gender, age, ethnicity, highest education level, number of previous readmissions, hospital length of stay	Patient Charts
Urbanity Status	Urban or rural status; based on Kentucky Beale codes	https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/
Smoke-Free Policy Status	Counties were coded as either having no smoke-free policy, a comprehensive policy, or a partial policy	http://www.uky.edu/breathe/tobacco-policy/smoke-free-communities/ordinance-database)
Substance Use History	Whether the patient had ever had a current or past substance use disorder, and whether they had ever received substance use treatment	Patient Charts
Tobacco Use History	Information on the type and amount of tobacco products used	Patient Charts

Main Analysis

- Chi-square analyses were used to assess for differences in demographic, urbanity status, smoke-free policy status, substance use history and treatment (SU/ST), and tobacco use status variables by psychiatric diagnoses categories (externalizing, internalizing, psychotic, and other).
- Univariate and multivariate logistic and linear regression analyses were used to determine variables associated with tobacco use status in the total sample and tobacco consumption among tobacco users.

RESULTS

- Sixty-three percent of the sample were tobacco users.

Multivariate correlates of tobacco use:

- Being male, having <high school education, prior SU/ST, having an externalizing or psychotic disorder, being from a rural county, being younger, and having a shorter hospital stay were associated with being a tobacco user.

Multivariate correlates of tobacco consumption:

- Among tobacco users, being male, white, having <high school education, and having an internalizing, externalizing, or psychotic disorder were associated with higher tobacco consumption. Living in a county with a comprehensive or partial smoke-free policy was associated with lower tobacco consumption.

Table 1: Sample Characteristics (N=2060)		
	N	**%**
Male	1162	56.4
White	1793	87.0
Education		
Less than high school	547	29.7
High school/GED	692	37.6
Greater than high school	602	32.7
History of Substance Use	1156	58.0
History of Substance Use Treatment	436	21.8
County Location		
Urban	1005	48.8
Rural	1055	51.2
County Smoke Free Policy		
None	928	45.0
Comprehensive	976	47.4
Partial	156	7.6
	M	**SD**
Age (years)	41.6	15.0
Number of Prior Hospitalizations	1.8	4.7
Length of Hospital Stay (days)	14.1	32.3

Figure 1: Percentage of Tobacco Users by Psychiatric & Substance Use Diagnosis Category

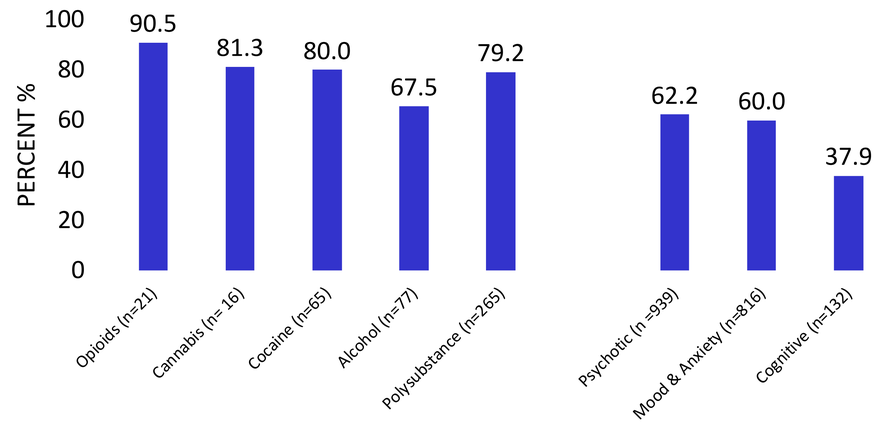


Figure 2: Percentage of Tobacco Users by Urbanity Status

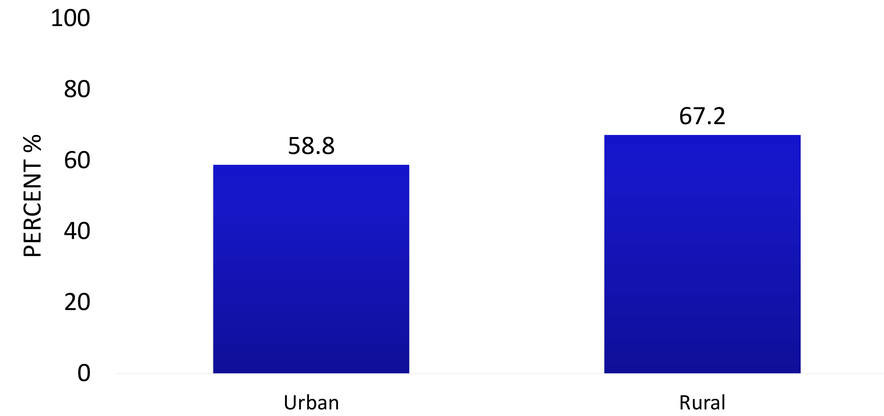
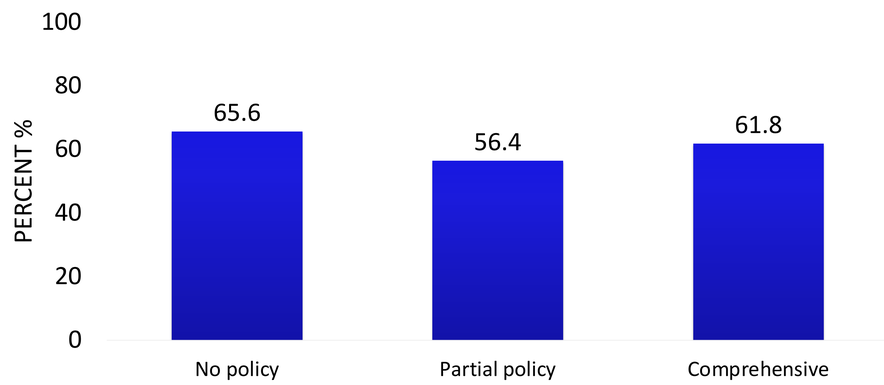


Figure 3: Percentage of Tobacco Users by County Smoke-Free Policy



IMPLICATIONS

Implications for Psychiatric-Mental Health Nursing:

- Train nurses to recognize correlates of tobacco use among patients and identify the need for greater support in smoking cessation
- Educate staff on potential correlates by psychiatric diagnosis categories

Implications for Research:

- Future research may expand on the current findings to develop strategies, accounting for correlates, to enhance tobacco treatment among people with MI

References
Centers for Disease Control and Prevention. (2013). Vital signs: current cigarette smoking among adults aged ≥18 Years with Mental Illness — United States, 2009–2011. MMWR. Morbidity and mortality weekly report, 62(5), 81.
Jamal, A., Phillips, E., Gentzke, A. S., Homa, D. M., Babb, S. D., King, B. A., & Neff, L. J. (2018). Current Cigarette Smoking Among Adults - United States, 2016. Morbidity and mortality weekly report, 67(2), 53-59. doi:http://dx.doi.org/10.15585/mmwr.mm6702a1
Prochaska, J. J., Das, S., & Young-Wolff, K. C. (2017). Smoking, Mental Illness, and Public Health. Annu Rev Public Health, 38(1), 165-185. doi:10.1146/annurev-publhealth-031816-044618