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Serious Mental Illness and Mental Health Treatment Utilization among Adults Residing in Non-Metropolitan and Metropolitan Counties

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Serious Mental Illness and Mental Health Treatment Utilization among Adults Residing in Non-Metropolitan and Metropolitan Counties

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KEY FINDINGS

- The past year prevalence of serious mental illness (SMI) was significantly higher among non-metropolitan than metropolitan (5.90% vs. 5.18%, $P < .03$) adults.
- Only 67.58% of non-metropolitan and 64.29% of metropolitan adults with SMI received *any* mental health (MH) treatment in the past year.
- Additional analyses revealed the following non-metropolitan/metropolitan treatment differences:
  - A higher percentage of non-metropolitan than metropolitan adults with SMI received only medication for MH treatment (24.50% vs. 18.53%, $P < .02$).
  - A higher percentage of metropolitan than non-metropolitan adults with SMI received inpatient, outpatient, *and* medication (5.42% vs. 2.63%, $P < .02$).
  - A significantly higher percentage of non-metropolitan than metropolitan adults with SMI reported that they did not seek mental health treatment because they had no transportation or treatment was inconvenient (11.57% vs. 6.87%, $P < .03$).

BACKGROUND

Serious mental illness (SMI) is defined as any mental illness (AMI) that results in severe impairment in the ability to perform major life functions.[1,2] Mental health disorders that often result in severe impairment and SMI include psychotic disorders (e.g., schizophrenia or schizoaffective disorder), affective disorders (e.g., major depressive and bipolar disorders), anxiety disorder, eating disorder, and personality disorder.[1]

Recently, the links between SMI and so-called "deaths of despair," or deaths from alcohol use, drug use, and suicide, have become a prominent public health concern.[3-6] Persons with SMI also tend to have elevated rates of morbidity and mortality for chronic physical illnesses such as cardiovascular diseases, some cancers, and diabetes and there is an extensive body of work showing an association between SMI and premature mortality.[6-11] People with SMI commonly face many barriers to receiving treatment[12] and these barriers may be more difficult to overcome for those in non-metropolitan counties. Mental health treatment providers tend to be relatively scarce in non-metropolitan areas of the country,[13,14] potentially resulting in fewer non-metropolitan residents receiving care for SMI.

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Yet, little recent research has compared the prevalence of SMI and mental health treatment utilization among non-metropolitan and metropolitan adults.[15]

STUDY PURPOSE

The objectives of this study were to:

1) Estimate and compare the prevalence of SMI among adults residing in non-metropolitan and metropolitan counties nationally.
2) Estimate and compare the prevalence of mental health treatment utilization and reasons for not seeking mental health treatment among adults with SMI residing in non-metropolitan and metropolitan counties nationally.

METHODS

Data. We analyzed public use data from the 2019 National Survey on Drug Use and Health (NSDUH), a nationally representative in-person survey administered by the Substance Abuse and Mental Health Services Administration (SAMHSA). NSDUH is the primary source of information on mental health, substance use, and treatment access among the civilian, non-institutionalized population ages 12 years and older in the U.S. The focus of this brief is on adults, or persons 18 years of age and older.

Serious Mental Illness (SMI). Adult NSDUH participants are considered to have SMI if they have met Diagnostic and Statistical Manual-IV (DSM-IV) criteria in the past year for a mental, behavioral, or emotional disorder (excluding substance use disorders and developmental disabilities) that substantially impaired their ability to perform major life functions. The NSDUH assesses SMI with a proprietary algorithm incorporating participants' responses to two scales embedded in the survey, the K6 instrument and an abbreviated form of the World Health Organization Disability Assessment Scale (WHODAS).

Mental Health Treatment Utilization. The NSDUH reports four, non-mutually exclusive indicators of past year mental health treatment utilization: 1) any mental health treatment (outpatient treatment/counseling, prescription medication for mental health, or inpatient treatment/counseling), 2) outpatient mental health treatment/counseling, 3) prescription medication for mental health, and 4) inpatient mental health treatment/counseling.

In addition, the NSDUH reports eight mutually exclusive indicators of past year mental health treatment utilization: 1) inpatient only, 2) outpatient only, 3) prescription medication only, 4) inpatient and outpatient only, 5) inpatient and prescription medication only, 6) outpatient and prescription medication only, 7) inpatient, outpatient, and prescription medication, and 8) no treatment.

Reasons for Not Receiving Mental Health Treatment. The NSDUH also assesses unmet need for mental health treatment by asking respondents, "During the past 12 months, was there any time when you needed mental health treatment or counseling for yourself but didn't get it?" with a yes/no response option. Participants who respond affirmatively are then asked to choose any of several possible reasons why they did not receive treatment, which are listed below:

Anonymity concern reasons: you were concerned that getting mental health treatment or counseling might cause your neighbors or community to have a negative opinion of you; you were concerned the information you gave the counselor might not be kept confidential; you didn't want others to find out that you needed treatment.

Negative attitudes and consequences reasons: you were concerned that getting mental health treatment or counseling might have a negative effect on your job; you were concerned that you might be committed to a psychiatric hospital or might have to take medicine.

Perceived need and benefit reasons: you didn't think you needed treatment at the time; you thought you could handle the problem without treatment; you didn't think treatment would help.

Financial reasons: you couldn't afford the cost; your health insurance does not cover or does not pay enough for mental health treatment or counseling.

Accessibility reasons: you did not know where to get services; you didn't have time (because of job, childcare, or other commitments); you had no transportation, or treatment was too far away, or the hours were not convenient.

Other: some other reason.

Non-Metropolitan/Metropolitan Residence. The 2019 NSDUH used 2013 Rural/Urban Continuum Codes to classify county of residence as non-metropolitan or metropolitan.

Analysis. We conducted descriptive analyses to compare and contrast prevalence rates for SMI, mental health treatment utilization, reasons for not seeking mental health treatment among adults residing in non-metropolitan and metropolitan counties. All analyses accounted for the NSDUH's complex sampling scheme and weights.

FINDINGS

The prevalence (%) of past year SMI was significantly higher ($P < .03$) among adults residing in non-metropolitan than metropolitan counties as displayed in Figure 1.

Figure 1. Serious Mental Illness by County Type

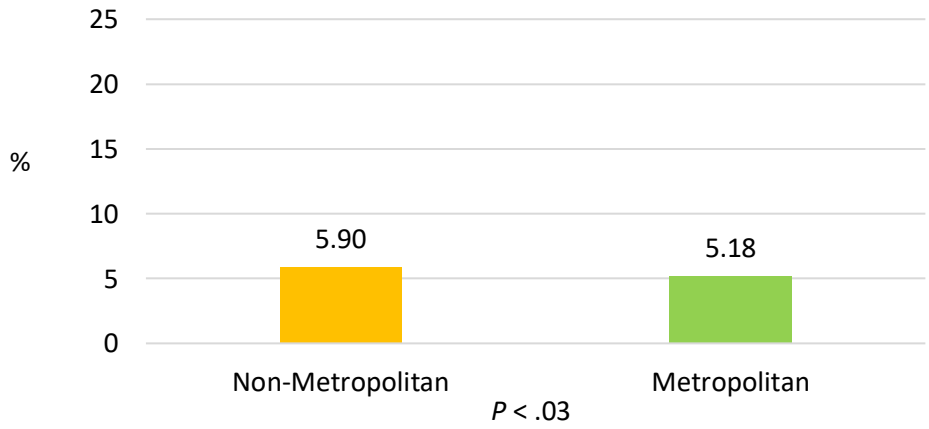

Figure 2 portrays mental health treatment utilization among persons with SMI. Although SMI was slightly more prevalent among non-metropolitan adults, the prevalence of past year mental health treatment utilization did not differ significantly among adults with SMI residing in non-metropolitan and metropolitan counties.

Figure 2. Mental Health Treatment Utilization by County Type

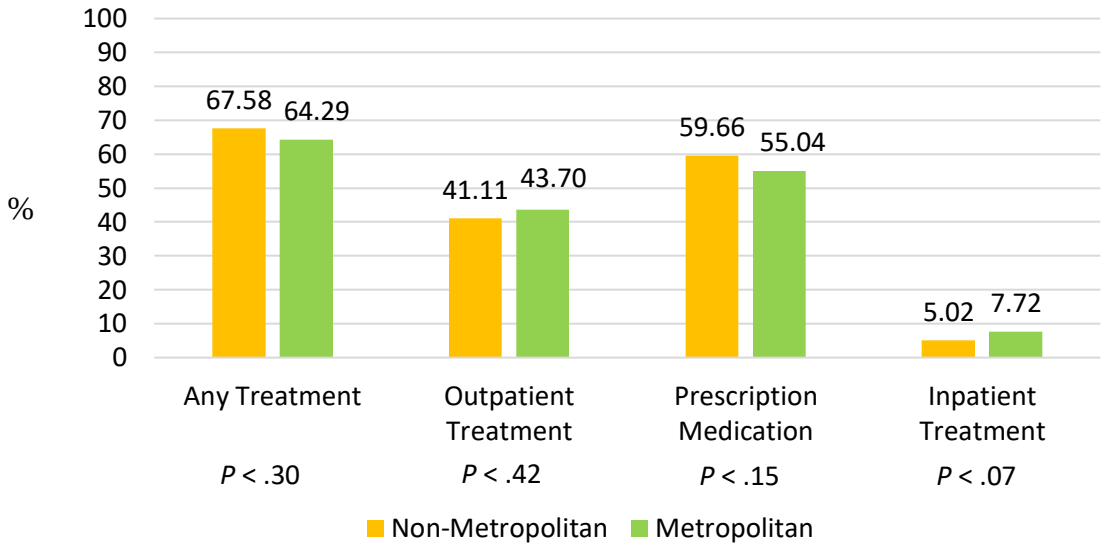

Table 1 shows describes the utilization of single types or combinations of mental health treatment by county type. A higher proportion of non-metropolitan than metropolitan adults with SMI received medication only (24.50% vs. 18.53%). A higher proportion to metropolitan than non-metropolitan adults with SMI received inpatient, outpatient, *and* medication (5.42% vs. 2.63%).

Table 1. Receipt of Single Types or Combinations of Mental Health Treatment Utilization by County Type

Type of Treatment	Metropolitan %	Non-Metropolitan %	*P* value
Inpatient only	0.64	0.20	<.07
Outpatient only	8.29	6.64	<.35
Medication only	18.53	24.50	<.02
Inpatient and outpatient	0.27	0.53	<.66
Inpatient and medication	1.30	1.72	<.53
Outpatient and medication	29.67	31.25	<.61
Inpatient, outpatient, *and* medication	5.42	2.63	<.02

Table 2 describes self-reporting reasons for not seeking mental health treatment by county type. A significantly higher percentage of non-metropolitan adults than metropolitan adults with SMI reported that they did not seek mental health treatment because they had no transportation or treatment was inconvenient (11.57% vs. 6.87%).

Reason Category	Reason Item	Metropolitan %	Non-Metropolitan %	*P* value
Anonymity	Fear of neighbors' negative opinion	11.29	9.53	<.51
	Didn't want others to find out	7.02	11.40	<.10
	Confidentiality concerns	12.18	13.99	<.54
Negative attitudes and consequences	Fear of negative effect on job	12.39	11.22	<.59
	Fear of being committed/medicated	20.04	24.85	<.29
Perceived need and benefits	Didn't think treatment was needed	7.53	10.31	<.22
	Could handle problem without help	10.16	11.01	<.81
	Didn't think treatment would help	13.38	15.01	<.61
Financial	Could not afford cost	47.47	45.36	<.69
	Insurance does not cover at all	7.52	8.31	<.80
	Insurance does not pay enough	17.23	15.00	<.54
Accessibility	Didn't have time	18.97	20.34	<.72
	No transportation or inconvenient	6.87	11.57	<.03
	Did not know where to go	24.99	23.84	<.80
Other	Some other reason	15.37	14.59	<.79

Table 2. Reasons for Not Seeking Need Mental Health Treatment by County Type

Note: Persons could choose more than one reason.

CONCLUSIONS

Summary. This report found that the prevalence of past year SMI is higher among adults residing in non-metropolitan than metropolitan counties. Regardless of county type, unmet treatment needs remain, as only 68% of non-metropolitan and 64% of metropolitan adults with SMI received any mental health treatment in the past year. In other words, approximately 32% of non-metropolitan and 36% of metropolitan adults with SMI received *no* mental health treatment at all in the prior year. Interestingly, rates of unmet treatment needs for SMI are very similar to rates of unmet treatment needs that we found for major depression in a prior study.[16]

Supplemental findings indicate that a higher proportion of non-metropolitan than metropolitan adults with SMI receive medication alone. Our prior report on treatment among adults with major depression yielded a similar finding.[16] In contrast, a higher proportion of metropolitan than non-metropolitan adults received inpatient, outpatient, *and* medication. The greater reliance on medication among non-metropolitan adults with SMI may be attributable to a lower availability of mental health counselors in non-metropolitan counties and barriers to traveling elsewhere for treatment. Supporting this explanation, non-metropolitan adults more frequently reported that not having transportation or convenient treatment was a deterrent to seeking mental health services. Regardless of county residence, the most commonly reported barriers to receiving mental health treatment among persons with SMI were not knowing where to go, a fear of being committed/medicated, and not having time for treatment.

Limitations. One limitation of this study that the NSDUH does not include persons who are homeless or incarcerated, which likely underestimates the number of persons with SMI. The Substance Use and Mental Health Services Administration (SAMHSA) recently funded the Mental and Substance Use Disorders Prevalence Study (MDPS) to provide contemporaneous estimates of mental health disorders among community-dwelling *and* institutionalized adults, but whether the MDPS will have a sufficient sample size to compare non-metropolitan and metropolitan adults remains unclear.

Potential Implications. Collectively, the findings reported here suggest that additional policies and programs are warranted to ensure access to mental health services for non-metropolitan and metropolitan residents. Further expansion of telehealth, which has been shown to be effective for delivering mental health services,[17-19] could help overcome the transportation and convenience barriers faced by some non-metropolitan adults with SMI. Task-sharing, which involves sharing some elements of health care delivery between highly trained mental health professionals (e.g., psychiatrists and clinical psychologists) and primary care professionals (e.g., primary care physicians and nurse practitioners) is another strategy that has been shown to be effective for expanding access to mental health services in low-resource settings and which could be expanded into non-metropolitan counties.[20] Future research should further investigate the effectiveness of telemedicine and task-sharing for improving access to mental health treatment among non-metropolitan adults with SMI.

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