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## Major Depression, Treatment Receipt, and Treatment Sources among Non-Metropolitan and Metropolitan Adults

Tyrone F. Borders, PhD

### Overview of Key Findings

- 7.8% of non-metropolitan (weighted number of persons=2,755,020) and 7.1% of metropolitan (weighted number of persons=14,868,655) adults had past year major depression.
- Treatment receipt (seeing a health professional *or* using prescription medication for depressive feelings) was similar among non-metropolitan (68.0%) and metropolitan (64.6%) adults.
- A closer examination of the type and source of treatment revealed the following:
  - Rates of seeing a health professional were similar among non-metropolitan (60.8%) and metropolitan (58.4%) adults, but rates of using prescription medication for depressive feelings were higher among non-metropolitan (58.2%) than metropolitan (48.6%) adults.
  - Rates of visiting a general practice/family doctor were higher among non-metropolitan (43.7%) than metropolitan (34.5%) adults.

### Background

Major depression (termed depression in the remainder of this report) is among the more common mental health illnesses in the U.S. and increased in prevalence from 2005 to 2015.<sup>1</sup> Yet, very little is known about the prevalence of depression and receipt of treatment for depression among non-metropolitan as compared to metropolitan residents. One study based on the 1999 National Health Interview Survey found that non-metropolitan adults had a higher prevalence of screening positive for depression than metropolitan adults.<sup>2</sup> More recently, a study based on National Survey on Drug Use and Health data covering the years 2009-2011 found no differences in the adjusted odds of depression between adults residing in large metropolitan and rural areas.<sup>3</sup> Even less information exists about potential non-metropolitan vs. metropolitan differences in the receipt of treatment for depression. One study based on data from the nationally representative Medical Expenditure Panel Surveys in 2000-2004 found no differences in the receipt of any treatment for depression, but found that non-metropolitan residence was associated with lower odds of the receipt of psychotherapy.<sup>4</sup>

### Purpose

The study objectives were to estimate and compare between non-metropolitan and metropolitan adults the:

1. Prevalence of depression.
2. Receipt of treatment for depression (seeing a health professional *or* using prescription medication).
3. Sources of treatment for depression (e.g., general practice/family doctors or mental health professionals).

**Methods**

**Data.** The data source was the Substance Abuse and Mental Health Services Administration’s (SAMHSA’s) 2017 National Survey on Drug Use and Health (NSDUH), the nation’s primary source of information on mental health and substance use for the U.S. household population.

**Major Depression.** The NSDUH defines major depression as a major depressive episode meeting Diagnostic and Statistical Manual of Mental Disorders-V (DSM-V) criteria, or “A period of at least two weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities, and had a majority of specified symptoms, such as problems with sleep, eating, energy, concentration, or self-worth” (see National Institute of Mental Health major depression information at <https://www.nimh.nih.gov/health/statistics/major-depression.shtml>).

**Receipt of Treatment (Saw Health Professional or Used Prescription Medication).** The NSDUH defined the receipt of treatment/counseling for major depression in the past year according to whether the individual 1) saw or talked to a medical doctor or other professional about depressive feelings or 2) used prescription medication for depressive feelings.

**Receipt of Treatment by Professional Type.** Persons who reported that they saw or talked to a medical doctor or other health professional about depressive feelings were asked whether they saw/talked to each of the following types of professionals about depressive feelings:

- 1) general practice/family doctor
- 2) psychiatrist
- 3) psychologist
- 4) counselor
- 5) social worker
- 6) other mental health professional, like a mental health nurse
- 7) nurse/occupational therapist
- 8) other doctor, like a cardiologist, gynecologist, or urologist

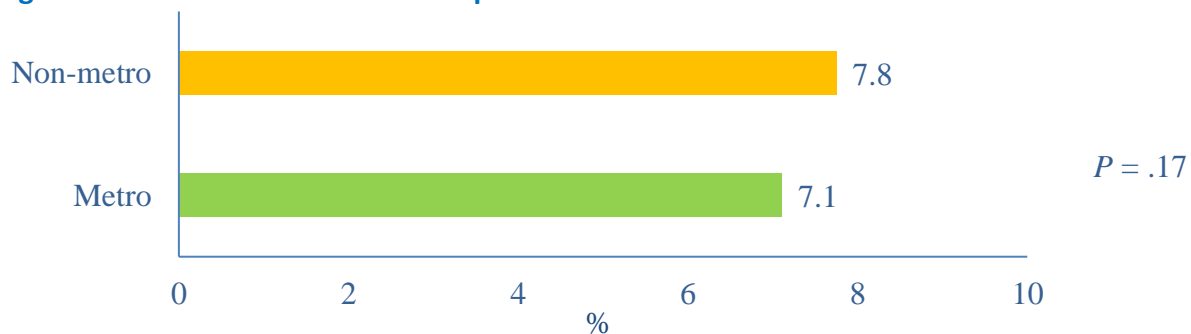
**Non-Metropolitan/Metropolitan Residence.** The NSDUH used 2013 Rural/Urban Continuum Codes to classify county of residence as non-metropolitan (non-metro) or metropolitan (metro).

**Analysis.** Prevalence rates were estimated and compared for adults residing in non-metropolitan and metropolitan counties. All analyses adjusted for the NSDUH’s complex sampling scheme and weights.

**Findings**

Figure 1 shows that past year depression was similar among non-metropolitan and metropolitan adults.

**Figure 1. Prevalence of Past Year Depression**



The prevalence of using prescription medication for depressive feelings was significantly higher ( $P < .001$ ) among non-metropolitan than metropolitan adults (58.2% vs. 48.6%, respectively) as shown in Figure 2. The prevalence of receiving any treatment (seeing a health professional *or* using medication for depressive feelings) did not differ significantly between non-metropolitan and metropolitan adults (68.0% and 64.6%, respectively). The prevalence of seeing a health professional to talk about depressive feelings also did not differ significantly between non-metropolitan and metropolitan adults (60.8% and 58.4%, respectively).

**Figure 2. Treatment Receipt among Adults with Past Year Depression**

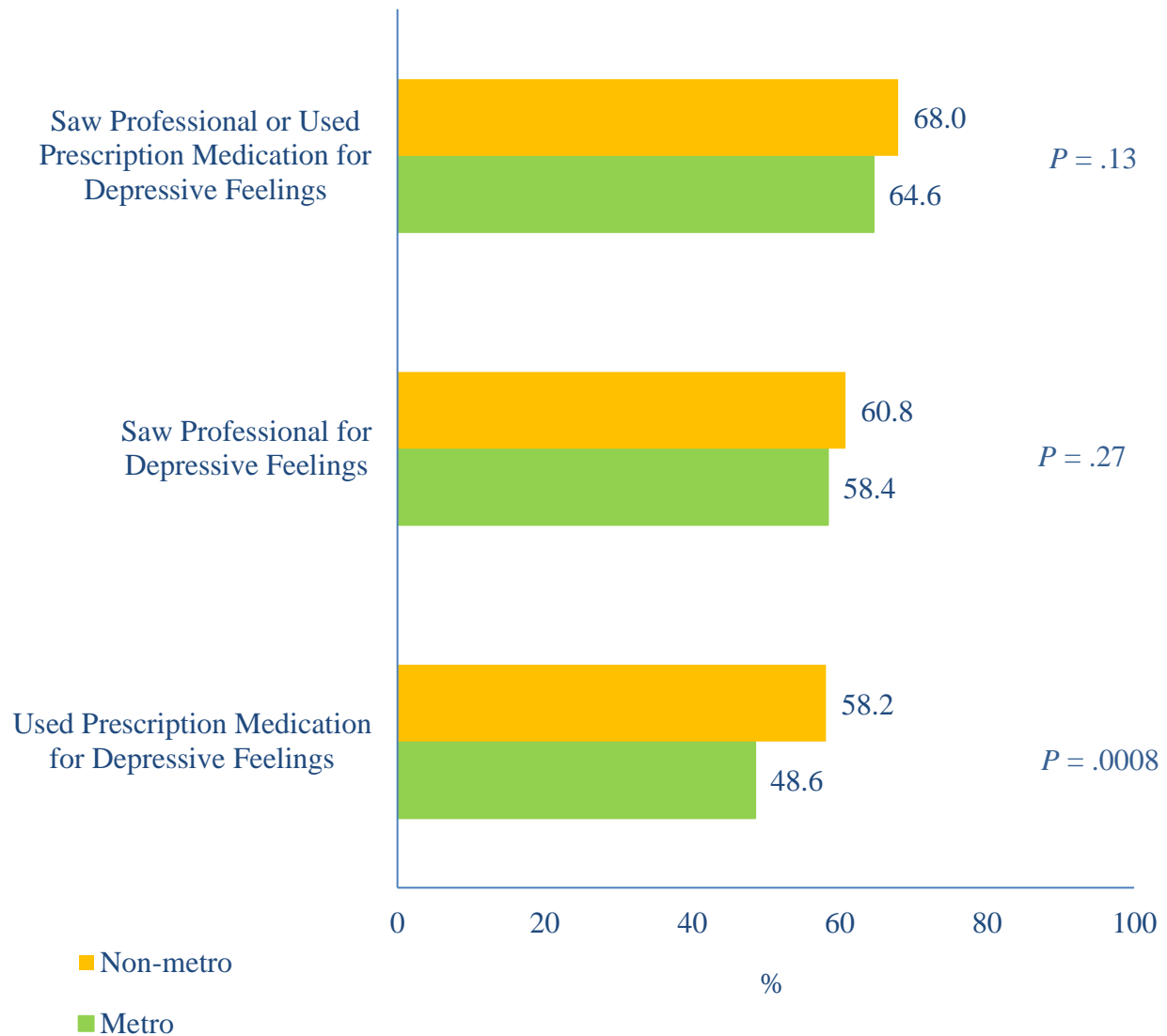
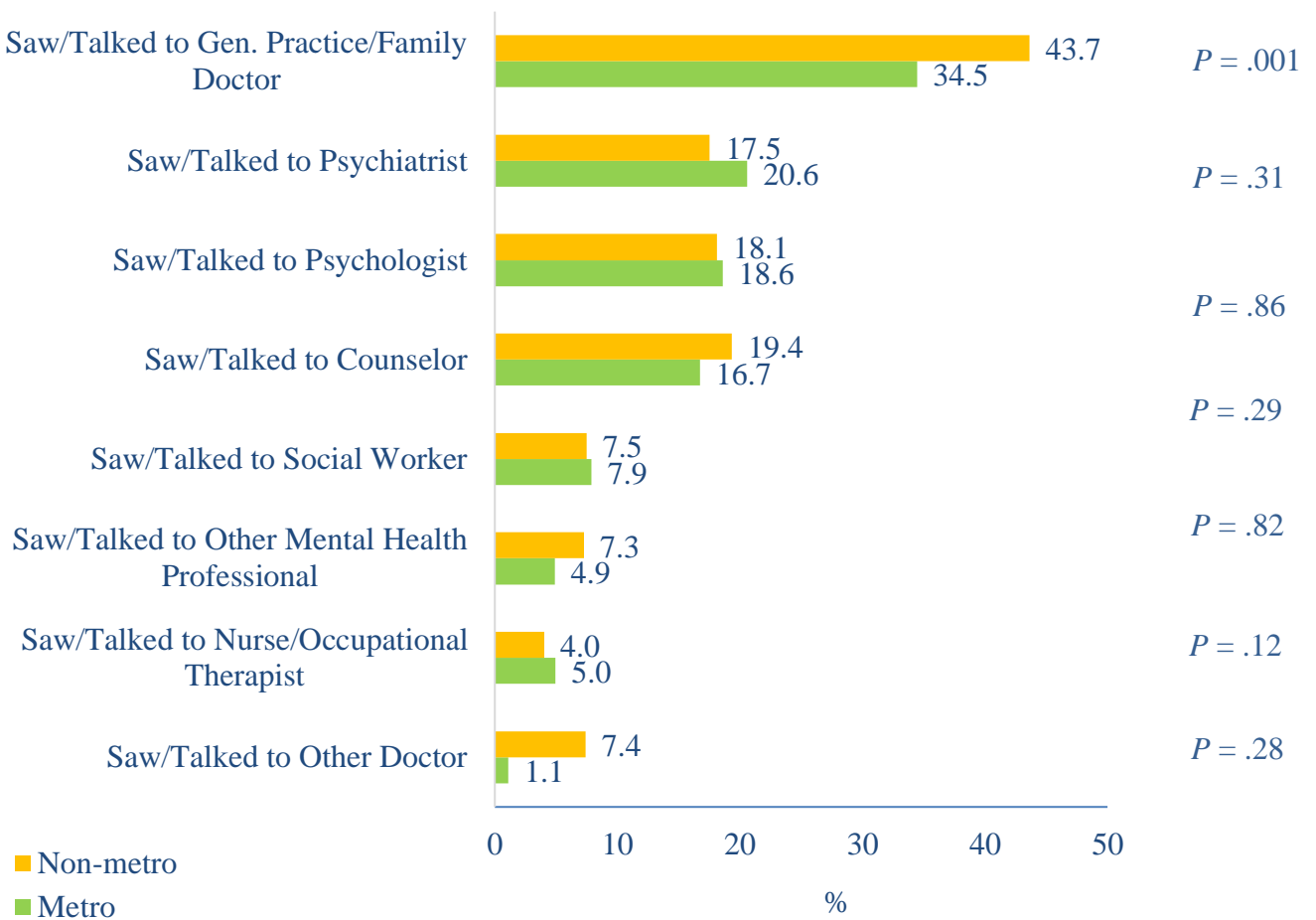


Figure 3 displays the sources of treatment for depression. The prevalence of seeing a general practice/family doctor for depressive feelings was higher among non-metropolitan than metropolitan adults (43.7% vs. 34.5%, respectively). Rates of visiting a mental health professional were relatively lower than rates of seeing a general practice/family doctor among both metropolitan and non-metropolitan adults.

**Figure 3. Types of Providers Persons Saw/Talked to about Depressive Feelings**



*Note:* Persons could choose more than 1 type of professional.

**Summary and Potential Policy Implications**

**Unmet Treatment Needs for Depression.** Depression remains a relatively common health problem, afflicting approximately 7% of both non-metropolitan and metropolitan adults in the U.S. A sizeable percentage of adults with depression (32.0% of non-metropolitan and 35.4% of metropolitan) do not receive any treatment, indicating substantial unmet treatment needs.

Unmet treatment needs for depression may also have implications for suicide prevention and control among populations residing in non-metropolitan and metropolitan areas. Rates of committed suicide have been much higher among residents of non-metropolitan compared to metropolitan counties for many decades.<sup>5</sup> Moreover, a policy brief produced by the Rural and Underserved Health Research Center reported that suicidal thoughts, plans, and attempts are higher among adults 18 years of age and older residing in non-metropolitan than large metropolitan counties.<sup>6</sup>

**Reliance on General Practice/Family Doctors for Depression Treatment.** General practice/family doctors were the predominant source of treatment for depression among non-metropolitan adults. Fewer than 20% of non-metropolitan adults with depression received treatment from a mental health professional (e.g., a psychiatrist, psychologist, or social worker). Non-metropolitan residents’ greater

reliance on general practice/family doctors than mental health professionals is likely partially attributable to a shortage of specialist mental health professionals (e.g., psychiatrists, psychologists, or social workers) in non-metropolitan counties.<sup>7</sup>

Non-metropolitan adults' higher rates of visiting general practice/family doctors for the treatment of depression are concerning because prior research found that the quality of treatment for depression in primary care is frequently inadequate. A study based on analyses of the Medical Expenditure Panel Surveys for the years 2000-2004 found that non-metropolitan residents were less likely to receive a minimally adequate number of psychotherapy visits than metropolitan residents with depression.<sup>4</sup> Medical education, residency, and continuing education programs producing rural general practice/family doctors may need to continue or expand training about how to appropriately detect and treat depression.

## References

1. Weinberger A, Gbedemah M, Martinez A, Nash D, Galea S, Goodwin R. Trends in depression prevalence in the USA from 2005 to 2015: widening disparities in vulnerable groups. *Psychol Med.* 2018;48(8):1308-1315.
2. Probst JC, Laditka SB, Moore CG, Harun N, Powell MP, Baxley EG. Rural-urban differences in depression prevalence: implications for family medicine. *Fam Med.* 2006;38(9):653-660.
3. Breslau J, Marshall GN, Pincus HA, Brown RA. Are mental disorders more common in urban than rural areas of the United States? *J Psychiatr Res.* 2014;56:50-55.
4. Rost K, Zhang M, Fortney J, Smith J, Smith Jr GR. Rural-urban differences in depression treatment and suicidality. *Med Care.* 1998;36(7):1098-1107.
5. Ivey-Stephenson AZ, Crosby AE, Jack SPD, Haileyesus T, Kresnow-Sedacca Mj. Suicide trends among and within urbanization levels by sex, race/ethnicity, age group, and mechanism of death - United States, 2001-2015. *MMWR Surveill Summ.* 2017;66(18):1-16.
6. Harp K, Borders TF. Suicidal Thoughts, Plans, and Attempts by Non-Metropolitan and Metropolitan Residence. Lexington, KY: Rural and Underserved Health Research Center; 2019.
7. Fortney JC, Pyne JM, Turner EE, et al. Telepsychiatry integration of mental health services into rural primary care settings. *Int Rev Psychiatry.* 2015;27(6):525-539.

## About the Author

Ty Borders is a Professor and Foundation for a Healthy Kentucky Endowed Chair in Rural Health Policy at the University of Kentucky.

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