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Rural–Urban Mental Health Disparities in the United States During COVID-19

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The United States has more confirmed deaths from coronavirus 2019 (COVID-19) than any other country in the world. State governors made decisions around social distancing in their jurisdictions, which caused schools and businesses to close. Those with broadband access continued a sense or normalcy in their lives. However, for the more than 20 million people who do not have broadband access, a different set of barriers has been experienced. These challenges are especially prominent in rural communities throughout various states. The present commentary addresses how health disparities for preexisting conditions place rural residents at greater risk for morbidity during COVID-19. Reasons for physical and mental health disparities, such as limited access to hospitals or specialty providers (e.g., psychiatrists), are described. Whereas telehealth is promoted as a way to meet health access needs, especially during a pandemic, this luxury is not readily available for all U.S. residents. Recent actions brought about by the government (e.g., the CARES Act) have tried to address the rural–urban gap in telehealth, but more is needed.

Keywords: COVID-19, rural, mental health, telehealth, broadband

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By April 2020, the United States had more confirmed coronavirus 2019 (COVID-19) cases and deaths than any other country in the world (World Health Organization, 2020). The geographical dispersion of the population made it challenging to address COVID-19 systematically. Each state governor proposed its own restrictions. Within each state, counties underwent unequal infection rates. More research is necessary to understand the magnitude of threat this pandemic poses in rural counties. Around 85% of the population resides in urban counties, yet 63% percent of U.S. counties classify as rural (Rothwell, Madans, & Arispe, 2014). However, in truth, rural–urban health disparities are a risk now more ever.

Rural communities are disproportionately affected by several health issues, such as heart disease (Kulshreshtha, Goyal, Dabhadkar, Veledar, & Vaccarino, 2014), cancer, and stroke (Moy et al., 2017), which primes them for higher risk of morbidity during COVID-19. Rural communities often have a higher percentage of people who struggle with substance use and mental health problems (Eberhardt & Pamuk, 2004). Between 2001 and 2015, the suicide rate was nearly 1.5 times higher in rural than in urban counties (Ivey-Stephenson, Crosby, Jack, Haileyesus, & Kresnow-Sedacca, 2017).

Two reasons behind mental health disparities are (a) poor access to health care and (b) limited availability to skilled mental health providers. Rural hospitals faced an increasing risk of closures. Between 2010 and 2019, 98 rural hospitals closed (Seigel, 2019). Rural counties also have fewer psychiatrists and psychologists than urban counties (Centers for Disease Control and Prevention, 2020). Table 1 and Table 2 present a selection of states and identifies the proportion of nonmetro counties based on standards set through the Urban–Rural Continuum Code from the United States Department of Agriculture (USDA). Data show that in some states, more than 50% of their counties do not have a psychiatrist (see Table 1) or psychologist (see Table 2). Also, a higher proportion of nonmetro counties consistently lack a psychiatrist (see Table 1) or psychologist (see Table 2) in comparison with metro counties.

These preexisting reasons for health disparities, as well as other challenges posed by living in a rural community, exacerbate mental health issues during COVID-19. Around the world, anxiety has driven people to respond by panic buying (Dholakia, 2020). Social distancing practices introduced feelings of isolation, disconnection from routines, and put residents at risk for depression. The state of mental health in the United States is further complicated by the fear felt by 22 million people unemployed (Long, 2020). Yet, for rural communities, the situation was more odious because they were experiencing all of these issues along with higher rates of preexisting conditions and lower access to health care.

One approach to addressing mental health needs during COVID-19 is telehealth (Leite, Hodgkinson, & Gruber, 2020; Ohannessian, Duong, & Odone, 2020; Zhou et al., 2020). However, telehealth requires broadband access, the capacity to pay for

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Table 1
The Proportion of U.S. Counties Without Access to a Psychiatrist

State	Total counties (% nonmetro)	Percent of counties without a psychiatrist	Percent of metro counties without a psychiatrist	Percent of nonmetro counties without a psychiatrist
California	58 (36.20)	13.79	0	38.09
Colorado	64 (70.15)	56.25	11.76	72.34
Illinois	102 (60.78)	59.80	35.00	75.58
Louisiana	65 (44.61)	58.46	38.89	82.76
Michigan	83 (68.67)	42.17	7.69	57.89
Montana	56 (90.07)	67.85	20.00	72.55
New York	62 (38.71)	14.51	10.52	20.83
North Carolina	100 (54.00)	36.00	23.91	46.30

technological devices like a smartphone or laptop, and a certain level of skills in operating this technology (Leite et al., 2020). That means for rural, older, and other vulnerable U.S. populations, telehealth is not currently a solution for the inequalities in mental health access.

From a mental health perspective, lack of broadband access during COVID-19 intensifies the vicious cycle of poverty and mental health across generations. The Federal Communications Commission (FCC) estimates that 21.3 million Americans do not have access to broadband, but other figures suggest that it is 42 million individuals (Busby, Tanberk, & BroadbandNow Team, 2020). For youth, no broadband access means no engagement in remote learning activities (Giorgi, 2020); therefore, students will be disconnected from peers or mentors and be more behind in learning milestones than urban or wealthier peers. For adults, no broadband access results in a limited capacity to work remotely (Giorgi, 2020). For all ages, especially the aging population, lack of broadband access means that grocery delivery apps are not a viable solution to the lack of resources. Therefore, the scarcity of broadband isolates rural communities further, inhibits residents from taking advantage of educational and economic opportunities, and bars prospective patients from receiving telehealth treatment to overcome the emotional challenges brought about by the pandemic.

From a national level, the government instituted the following changes during the pandemic to bridge the broadband gap:

1. Keep Americans Connected Pledge (FCC, 2020b)
    a. For 60 days starting in the middle of March, telecommunications providers agreed not to terminate service or change late fees for 60 days.
    b. Waiving gift rules so that health care provides, schools, and libraries can offer better telehealth and remote learning activities (e.g., accepting Wi-Fi hotspots, networking gear).
2. CARES Act
    a. $100 million provided to the USDA for its ReConnect Program, a program which brings broadband to rural areas (USDA, 2020).
    b. $200 million for a telehealth program to connect hospitals and clinics to their patients remotely (e.g., purchasing communication devices; FCC, 2020a).

Despite these changes, several issues are still not addressed. First, although $100 million was invested in increasing broadband access, $80 billion is needed to bring broadband to all U.S. residents (Giorgi, 2020). Second, the $200 million invested in the telehealth program assumes that patients already have broadband access. Last but not least, the sustainability of the changes brought by this money is uncertain.

For now, as communities face new mental health challenges each day, the initiation of locally driven approaches have filled the gaps where governmental resources have not reached. For instance, schools offered meal pick-ups (Barnett, 2020) or drop-offs using the bus route (ABC12 News, 2020) so that youth did not go hungry. In another endeavor, a hospital created an emotional support hotline available to all people who experienced anxiety and stress during COVID-19 (Forde, 2020). Finally, there are the anecdotal stories not widely publicized in the media, such as

Table 2
The Proportion of U.S. Counties Without Access to a Psychologist

State	Total counties (% nonmetro)	Percent of counties without a psychologist	Percent of metro counties without a psychologist	Percent of nonmetro counties without a psychologist
California	58 (36.20)	8.62	0	23.80
Colorado	64 (70.15)	36.92	11.76	46.80
Illinois	102 (60.78)	45.09	32.50	53.22
Louisiana	65 (44.61)	50.76	44.44	83.38
Michigan	83 (68.67)	10.84	0	12.28
Montana	56 (90.07)	55.35	40.00	56.86
New York	62 (38.71)	4.83	2.09	8.33
North Carolina	100 (54.00)	17.00	10.87	22.22

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stories of residents buying meals to donate to hospital staff on the front lines or teachers delivering printed school materials so that students from disadvantaged backgrounds are not left behind. Without a system-wide change to broadband access, economic, physical health, and mental health disparities will persist. In the meantime, grassroots movements will continue to thrive in times of need.

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