# Despair in the American Heartland? A Focus on Rural Health

# See also Stein et al., p. 1541; Nestadt et al., p. 1548; Roberts et al., p. 1544; Bor, p. 1560; Meit and Knudson, p. 1563; Scutchfield and Keck, p. 1564; and Diez Roux, p. 1566.

In this issue of AJPH, we provide a special focus on the health of rural populations in the United States, with four research articles and accompanying editorials. The article that initiated this focus-Stein et al. (p. 1541) on the "The Epidemic of Despair Among White Americans"-highlights the increase in premature mortality among rural and nonurban populations, primarily driven by "self-destructive behaviors" resulting in increased deaths from accidental poisoning (particularly opioid overdose), suicide, and liver disease. The authors paraphrase from Case and Deaton<sup>1</sup> in trying to explain their findings, notably that

the stress and hopelessness faced by this population as they enter the labor market and are met with bleaker prospects and lower paying job opportunities relative to the prior generation . . . [has led] to compounding family dysfunction, poor social support, and addiction, conditions that are the drivers of despair deaths (p. 1545).

### DESTRUCTIVE BEHAVIORS

Nestadt et al. (p. 1548) provide further insights on suicide in rural areas, with results specific to Maryland, noting that increased suicide rates were driven by male firearm use in rural areas. Roberts et al. (p. 1544) remind us that tobacco use-still the most important preventable cause of mortalityis significantly higher in rural areas than in urban areas, and that emerging tobacco products such as e-cigarettes are just as prevalent in rural areas as in urban areas. Finally, Bor (p. 1560) completes the circle back to Stein et al. by showing a negative correlation between changes in life expectancy over the past 30 years and the share of county residents casting ballots for Donald Trump in the 2016 presidential election. As Meit and Knudson note in their editorial,

In communities that are struggling economically, with low educational attainment and rising health inequities . . . where they feel ignored by one party and taken for granted by the other . . . is it really a surprise that a message of 'change' was appealing? (p. 1563)

### MY FIRST-HAND EXPERIENCE

Although the roots of the "epidemic of despair" and any association with presidential politics can be fraught with misinterpretations on causality, the changes that many of these authors allude to are changes I have experienced firsthand. I grew up in northerm

Alabama, at the tail end of the Appalachians. During my youth (1960s to mid-1970s), the small family farm still existed for some, but for many others-particularly those with lower educational attainment-the jobs included the spinning mill (producing carpet varn), the shirt factory, and chicken processing plants. Today, the spinning mill-where I worked the graveyard shift during breaks home from college, and whose long-term employees proudly displayed plaques showing 30 and 40 years of employment-does not even exist, and the chicken processing plants employ a mostly Hispanic immigrant workforce. For high-school graduates who do not go on to college-and that is the majoritythe local options for decent paying jobs with benefits are limited. This is the world brought vividly to light by J. D. Vance's Hillbilly Elegy.<sup>2</sup>

# WHY DID IT TAKE US SO LONG TO GET HERE?

Meit and Knudson ask, "Why did it take us so long to get here?," since rural health inequities have been observed for decades. Perhaps the answer does have something to do with the 2016 presidential election, at least with many of us trying to understand why the vote went the way that it did. How many of us now living in urban areas asked our rural compatriots why? Indeed, how many of us even know rural folks well enough to pose such a question? The upheavals that have followed the election have shaken us awake. And if. as Scutchfield and Keck (p. 1564) surmise, "Solutions to this public health crisis must start with political changewhich may be the ultimate social determinant of health," I am baffled even more: the very people largely responsible for electing Donald Trump will be hurt most by his policies to date on health, the environment, and the economy.

### WORSENING HEALTH INEQUITIES

Lest we overread these changes in death and disease in certain subpopulations, Diez Roux's (p. 1566) message rings clear: while the increasing mortality rates among (predominately) rural and nonurban Whites is alarming and should move us to action, the persistent health inequities between (especially) African Americans and non-Hispanic Whites remain unacceptable. Indeed, if these articles lead all of us to give greater attention to the social

#### ABOUT THE AUTHOR

Paul Campbell Erwin is with the Department of Public Health, University of Tennessee, Knoxville, and serves as an associate editor of AJPH.

Correspondence should be sent to Paul Campbell Erwin, MD, DrPH, Professor and Department Head, Department of Public Health, University of Tennessee, 1914 Andy Holt Ave, Knoxville, TN 37996 (e-mail: perwin@utk.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

*This editorial was accepted July 12, 2017. doi: 10.2105/AJPH.2017.304029* 

October 2017, Vol 107, No. 10 AJPH

determinants of health including the scourge of racism, and the challenges of geography and political economy—then, as Diez Roux notes, "their publication will have accomplished very much indeed" (p. 1567).

In the end, what Stein et al., as well as the others in this special rural health focus present is a forewarning: given the long view, the social determinants at play will continue to have a negative impact on health outcomes well into the future. But we now realize that they also have an impact, negatively from my point of view, on democracy and justice. It will very likely get worse before it gets better. Some may read this as resignation; I mean it as a cry for redoubling public health's commitment to social justice. *A*JPH

> Paul Campbell Erwin, MD, DrPH

#### ACKNOWLEDGMENTS

The author wishes to acknowledge *AJPH* Editor-in-Chief Alfredo Morabia,

## Preexposure Prophylaxis: Adapting HIV Prevention Models to Achieve Worldwide Access

See also Holt and Murphy, p. 1568; Calabrese et al., p. 1572; Samandari et al., p. 1577; and Greene, p. 1580.

The efficacy of Truvada as a means of preexposure prophylaxis (PrEP) for individuals at high risk for HIV infection is well established with the first comprehensive guidelines for administration of PrEP developed and published by the Centers for Disease Control and Prevention in 2014.<sup>1</sup> The availability of PrEP as a biomedical mechanism for HIV prevention is considered a "game changer" in HIV prevention efforts, much as the widespread availability of highly active antiretroviral therapy (HAART-more commonly referred to as "ART") was considered for HIV treatment in 1996. However, many of the questions that followed this breakthrough in HIV treatment are now being put forth regarding PrEP. How much does it cost? Who should pay for it? Will there be disparities in access to PrEP in the United States and how will we overcome these disparities? How can we afford to pay for PrEP when many people around the world still do not have access to ART?

#### ENHANCING ACCESS TO PREEXPOSURE PROPHYLAXIS

Where will the resources come from to support the use of PrEP in low- and middle-income countries? This question was very much on the minds of clinicians and advocates at the introduction of ART in the mid to late 1990s. How would a daily regimen of expensive HIV medications (three of them!) needed to treat individuals for years and possibly decades be affordable for the millions of HIV-infected persons in less developed nations, many of which have per capita health spending the equivalent of a few hundred US dollars per year or less?

Through cross-sectorial advocacy and lobbying efforts, the President's Emergency Plan for AIDS Relief (PEPFAR) was launched in 2003.<sup>2</sup> Although not perfect, the PEPFAR program has played a key role in extending the reach of ART to millions of HIV-positive persons in more than 60 countries. More recently, the PEPFAR DREAMS (Determined, Resilient, Empowered, AIDS-free, Mentored and Safe)<sup>3</sup> initiative has launched efforts to provide PrEP in 10 sub-Saharan African countries to prevent HIV infections in adolescent girls and young women. However, models to broaden scale-up and rapid access to PrEP in other key populations are still necessary.

In the United States, the Ryan White HIV/AIDS Program, through the AIDS Drug Assistance Program (ADAP), has provided ART for low-income individuals, helping to provide lifesaving treatment to hundreds of thousands of individuals. Administered by the states, ADAP has played a crucial role in reducing socioeconomic disparities in access to HIV medications for those with limited or no health insurance. MD, PhD, for helpful comments on an earlier version of this editorial.

#### REFERENCES

1. Case A, Deaton A. Rising morbidity and mortality in midlife among White non-Hispanic Americans in the 21st century. *Proc Natl Acad Sci U S A*. 2015; 112(49):15078–15083.

2. Vance JD. Hillbilly Elegy: A Memoir of a Family and Culture in Crisis. New York, NY: HarperCollins; 2016.

Although Truvada for PrEP cannot be purchased through ADAP, some states have adapted the ADAP model for access to medications, resulting in several PrEP drug assistance programs around the country. First launched in Washington State, the PrEP drug assistance program was a key strategy in the state's efforts to decrease the number of incident HIV infections by reducing cost barriers to PrEP. This program has served as a model for other states and was later implemented in Massachusetts and New York. But it bears noting that the success of these programs relies on campaigns that raise awareness not only of PrEP but also of mechanisms for enhancing access to PrEP among PrEP users and health care providers.

A similar strategy should be pursued globally, particularly in low- and middle-income countries, for increasing access to PrEP to those most at risk for HIV. Infrastructure in place for supply chain management of highly active antiretroviral therapy can and should be extended to include PrEP. Although funds may

#### **ABOUT THE AUTHORS**

Stewart Landers is with US Health Services, John Snow, Inc. Boston, MA. Farzana Kapadia is with the College of Global Public Health and the Department of Population Health, New York University, New York, NY.

Correspondence should be sent to Stewart Landers, Director, US Health Services, Boston Office, John Snow, Inc., 44 Farnsworth Street, Boston, MA 02210 (e-mail: stewart\_landers@ jsi.com). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link. This editorial was accepted July 14, 2017.

doi: 10.2105/AJPH.2017.304035