The 1918 Influenza Pandemic Has Lessons for COVID-19: An Anthropology Student Perspective

Taylor P. van Doren, MA

ABOUT THE AUTHOR

Taylor P. van Doren is a PhD candidate in the Department of Anthropology, University of Missouri, Columbia.

See also Watts Isley et al., p. 63, and the Student Perspectives on COVID-19 section, pp. 62–87.

As an anthropologist and 1918 influenza pandemic scholar, 2020 was a strange year. As a result of the coronavirus disease 2019 (COVID-19) pandemic, there has been renewed interest in the century-old pandemic and an acknowledgment of the value of a comprehensive understanding of exactly what happened between the spring of 1918 and 1920. It has been written that the consequences of COVID-19 on the economy, socioeconomic structure, and health care systems will persist well beyond its completion,[1] and the same was said (and was true) of the 1918 influenza.[2] Anthropology and public health need not be mutually exclusive fields; an increased understanding of demographic processes, human behaviors, and human biology that the biocultural anthropological perspective can provide will prove to be highly valuable to public health in the coming years.

MORE THAN NUMBERS

Nothing puts a generation-defining public health crisis into perspective quite like the geographic and social proximity of the ultimate adverse health outcome: the loss of human life. Real-time mortality statistics from COVID-19 have forced me to reframe how similar mortality data from a century ago can be approached. The primary database used for my historical research consisting of about 41 300 death records includes the name, age, sex, and place of death. I know where these people were born, where they are buried, and sometimes what they did for a living.

Each line of this database was a whole person. Each one had an extremely complex, important life of which we know little, which is difficult to understand because of the propensity of the human mind to perceive its own life as the most complex and important. Furthermore, all of the 50 to 100 million people who died from 1918 through 1920 worldwide[3] had full lives with family, love, adversity, happiness, desires, intelligence, and curiosity. Population-level approaches and a century of temporal separation can have the unfortunate consequence of homogenizing the lived experiences of those who died.

One fragment of the monumental tragedy of the 1918 influenza pandemic was that young adults aged 20 to 44 years experienced the most unprecedented excess mortality, and these individuals likely would have gone on to live at least twice as long[4] and were robbed of the immense privilege of growing old. In addition, influenza pandemic morbidity and mortality were nonrandom; socioeconomic status was a strong predictor for who eventually succumbed to the infection, and those with lower income, more crowded housing, and weaker kin relationships had the highest burden of illness and mortality.[5] They deserve to be remembered as more than numbers.

SOCIOECONOMIC INEQUALITY IN HINDSIGHT

Epidemiological methods are dependent on data such as these, but from an anthropological perspective, it is essential to account for the human experience to best understand the true impact of both the 1918 and the COVID-19 pandemics. It was the temporal and geographic proximity of the COVID-19 threat or, more specifically, the moment when the United States reported its 100 000th lost life that prompted me to refocus the lens of my 1918 influenza pandemic research and rendered me unable to confront my dissertation for weeks.

This knowledge is important, however, and historical information can contribute to positive evolution of the field of public health in a couple of specific ways in the coming months and years. The most obvious connection between the epidemiological knowledge of the 1918 pandemic

and that of the COVID-19 pandemic is that history provides ample insights into how current and future infectious epidemic threats will adversely affect some more than others. Even though proximate causes of infection and mortality (such as a specific pathogen) change often, ultimate causes such as poverty, crowding, and resource insecurity rarely do. Today we have a considerable advantage over (what existed of) public health departments and epidemiological knowledge in the early 20th century. Although the first epidemiological study of the 1918 pandemic was published in 1919,[6] it was not until decades later that extensive study of demographic and socioeconomic determinants of morbidity and mortality was underway.

Despite being armed with this information, a clear socioeconomic gradient remains in susceptibility to infection and eventually mortality from COVID-19. Whether this reality could have been prevented depends on unraveling many of the social institutions that sustain socioeconomic inequalities. The critical issue is that we should not have been surprised that the observed gradient of susceptibility is what it is—the same conglomerate of ultimate determinants that influenced differential 1918 influenza susceptibility. Knowledge of, and more importantly, action on these important variations in risk is fundamental for public health social services to target vulnerable subpopulations for benefits that mitigate the dangers of even a novel pathogen.

ANTHROPOLOGY'S FUTURE ROLE

Anthropological knowledge, specifically that of the 1918 influenza pandemic and its consequences, can therefore contribute to public health through the biocultural perspective on human biology, health, and culture. Biocultural anthropology is a special subfield of medical anthropology that emphasizes the simultaneous contribution of human biological plasticity and the cultural elements of anthropology such as social structure, political economy, and globalization to the holistic understanding of the human experience.[7] Recently, there has been a call for more consideration of historical context in how modern populations have come to embody culture as health and inequality; therefore, investigating the cultural and biological effects of the 1918 pandemic can give context for how modern inequalities have come to be embodied. This perspective clearly builds on the social determinants of health, for which public health is widely recognized, but also acknowledges that biology and culture are inextricable and forever coevolving. It can also illuminate reasons that ultimate causes of vulnerability and mortality are sustained over broad temporal depth.

Comprehensive, interdisciplinary education is the most effective starting place for sustainable transformations; to create needle-moving change, public health departments can begin to seek out anthropologists to contribute to their already diverse faculties so that anthropology becomes a formal component of the public health field. Furthermore, to supplement strong social determinants curricula, a required biocultural anthropology course would serve as the bridge to link knowledge of the social determinants of health, globalization, and political economy to how culture can manifest as susceptibility of the physical body over time.

Indeed, we are likely amid the defining moment of the 2020s and far beyond. There is no question that public health will experience transformations that otherwise would not have occurred without this moment. The experience of the COVID-19 pandemic may lay the groundwork for changes in the way the next generation of public health experts are educated holistically to better understand the totality of lived experiences of the vulnerable. Ultimately, public health, like anthropology, depends on centering the human experience and the value of life to determine how to make the next move. AJPH

CORRESPONDENCE

Correspondence should be sent to Taylor P. van Doren, MA, University of Missouri, Department of Anthropology, 112 Swallow Hall, Columbia, MO 65211 (e-mail: tmpwf4@mail.missouri.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

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CONFLICTS OF INTEREST

The author has no conflicts of interest to disclose.

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