Vulnerable Populations: Weathering the Pandemic Storm

Elizabeth M. Salisbury-Afshar, MD, MPH,1,2 Josiah D. Rich, MD, MPH,3,4 Eli Y. Adashi, MD, MS5

INTRODUCTION

In the fog of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic, vulnerable populations will be overlooked. Marginalized in the best of times, the millions of people experiencing homelessness, struggling with substance use disorder, or incarcerated must not be left out. As in previous epidemics, these populations will pay the greatest price. Viewed through the lens of the Universal Declaration of Human Rights and related treaties, all humans deserve medical care, necessary social services, and security of livelihood in situations out of one’s control.1 A similar conclusion will be arrived at on pragmatic public health grounds if the SARS-CoV-2 epidemic curve is to be flattened. Social distancing may either be physically infeasible or else unlikely to be meticulously adhered to. Every group represents a potential reservoir of infection that could infect others. Yet, even with the awareness that all individuals deserve access to services and that supporting marginalized populations will slow the spread of SARS-CoV-2, resource limitations will demand difficult allocation determinations. The governmental, medical, and public health responses will dictate whether existing health inequities are worsened during the pandemic. Containing the pandemic requires a vigorous attempt to redress the needs of the voiceless. Failure to do so is not an option.

The most important public health intervention to reduce the spread of SARS-CoV-2 is social distancing through self-isolation and cancellation of group gatherings. However, social distancing is not possible for homeless or incarcerated people. Few, if any, alternatives exist for these populations and expedient planning and alternative solutions are needed.

PEOPLE EXPERIENCING HOMELESSNESS

Homeless shelters are minimally staffed and overcrowded with large fluxes of people and limited bathroom access—ideal for viral transmission. Amid this pandemic, shelters are reducing staffing and clientele while experiencing increasing demand for services. Consistent with guidance from the Centers for Disease Control and Prevention, symptom screening protocols are being implemented to identify individuals with fever or respiratory illness,2 and although facilities strive to isolate symptomatic individuals, they are often unable to do so owing to space limitations. The long incubation period of SARS-CoV-2 and the heterogeneous clinical presentation may render symptom screening to be a limited tool, especially given that individuals may be asymptomatic with SARS-CoV-2. Preliminary reports from post-exposure testing at a homeless shelter in Boston found a 36% case rate of SARS-CoV-2 from their cohort of 408 clients who received the polymerase chain reaction test, but only a small percentage had cough (7.5%), shortness of breath (1.4%), or fever (0.7%).3 New research suggests that the estimated cumulative frequency of coronavirus disease 2019 (COVID-19) cases among adults experiencing homelessness in Boston were 46.3 cases per 1,000 compared with 1.9 cases per 1,000 adults in Massachusetts over the same 15-day period.4 Without access to universal polymerase chain reaction testing for all individuals entering shelters and an ability to safely isolate individuals who are positive, SARS-CoV-2 transmission is likely to continue, and cities should prepare for the possibility of an increased burden of the disease among populations experiencing homelessness.

Many individuals experiencing homelessness with SARS-CoV-2 will not meet hospitalization criteria and

From the 1Center for Addiction Research and Effective Solutions, American Institutes for Research, Chicago, Illinois; 2Heartland Alliance Health, Chicago, Illinois; 3Department of Medicine and Epidemiology, Brown University, Providence, Rhode Island; 4Center for Prisoner Health and Human Rights, The Miriam Hospital, Providence, Rhode Island; and 5Department of Medical Science, Warren Alpert Medical School, Brown University, Providence, Rhode Island

Address correspondence to: Elizabeth M. Salisbury-Afshar, MD, MPH, Center for Addiction Research and Effective Solutions, American Institutes for Research, 10 S. Riverside Plaza Suite 600, Chicago IL 60606.
E-mail: esalisbury@air.org.
0749-3797/$36.00
will be discharged into the general population. Inadequate social services will result in infected people spending more time in public places, thereby contributing to the spread of the virus. The SARS-CoV-2 response must prioritize access to testing in congregate settings and ensure access to shelters that can follow isolation and quarantine recommendations. Local coordination of shelter services will be required to ensure that both asymptomatic individuals without COVID-19 and those who are exposed or diagnosed with the disease have safe places to quarantine and isolate. In most localities, this will require identification of new facilities such as hotels, dormitories, and closed public buildings.

PEOPLE WHO ARE INCARCERATED

Correctional facilities are densely populated, closed spaces with a constant flow of human activity. During the H1N1 pandemic of 2009–2010, an Australian correctional facility reported effective containment of the virus through limiting visitors to the facility and implementing symptom screenings, isolating cases, and quarantining contacts. Although most U.S. jails and prisons have already implemented such measures, the longer incubation period of SARS-CoV-2, higher baseline prevalence in many communities, and ongoing staff movement in and out of the facility makes it unlikely that the virus will stay out. This will lead to added strain on local healthcare facilities when they have limited capacity to handle additional patients.

The Centers for Disease Control and Prevention currently recommends avoiding cohorting those at higher risk for severe illness from COVID-19 with others. If it is unavoidable, then accommodations should be made to prevent transmission to the higher-risk individuals. At the time of this report, at least 1 correctional facility (J Clarke, RI DOC, personal communication, 2020) has separated individuals at risk for severe diseases from others as much as possible, yet the efficacy of this practice is still unclear. In addition to the measures taken inside correctional facilities, authorities must move quickly to reassess security and public health risks. Release of individuals who do not pose an immediate threat to public safety while reducing arrests and delaying sentencing is prudent. Individuals who are being held in jails because of their inability to afford bail or for minor infractions or violations should be released with support to ensure safe shelter. Similarly, those eligible for parole can and should be released. Already, it has been observed that SARS-CoV-2 outbreaks in correctional settings spread quickly, with reports from Cook County Jail in Illinois going from 2 positive cases to more than 350 confirmed positive cases in slightly more than 2 weeks. The U.S., which has the highest worldwide incarceration rate and a disproportionately greater minority and disadvantaged population, must act swiftly to protect the health and safety of incarcerated individuals and the community at large.

PEOPLE WITH OPIOID USE DISORDER

This pandemic comes to the U.S. amid the opioid epidemic. Experiences from disasters like Hurricanes Katrina and Sandy have taught that illicit drug market disruptions place people who use drugs at risk for supply discontinuity, paraphernalia shortage, and social disconnection. This will happen now. Furthermore, shutdowns will disrupt the ability to generate income necessary to support drug use. The result will be decreased use, loss of tolerance, and risk for overdose. Sharing or reusing scarce syringes will increase infectious diseases. Individuals who use opioids may be more interested in initiating medication for opioid use disorder. However, the treatments with the strongest evidence—methadone and buprenorphine—are not readily accessible in many parts of the country. One million individuals with opioid use disorder did not have access to medication for the disorder in 2012. In response to SARS-CoV-2, the Substance Abuse and Mental Health Services Administration has developed emergency regulations to support medication for opioid use disorder through telehealth and temporarily waived the requirement for in-person physical examination to be able to initiate buprenorphine. To further increase access, the Drug Addiction Treatment Act of 2000 waiver should be suspended to allow any prescriber with a Drug Enforcement Administration license to prescribe buprenorphine. At a minimum, patient limits should be removed to allow existing buprenorphine prescribers to take on more new patients.

CONCLUSIONS

These often-forgotten populations—people incarcerated, homeless, or using drugs—are likely to experience a higher risk of exposure to SARS-CoV-2 because of their social circumstances. They also have higher rates of medical comorbidities than the general population, thereby putting them at risk for more severe disease or death once exposed. If existing surge capacity models hold true, hospitals will reach bed capacity quickly, and triaging to prioritize resources for those at least risk for death may ensue, similar to what is happening in Italy. Vulnerable populations will likely experience further marginalization in this pandemic. For example, if there is 1 remaining ventilator and several patients in
need, will the individual who is experiencing homelessness and using illicit drugs be the one selected? Stigma against people who use drugs and other biases of care teams will become more pronounced in stressed and under-resourced hospital settings, thereby impacting allocation of resources and exacerbating existing health inequities.

Central to the SARS-CoV-2 response must be a focus on forgotten populations. Planning should incorporate dedicated efforts, funding, and policies/guidelines specific to individuals who experience homelessness, are incarcerated, or are coping with substance use disorders both because these populations deserve care and services and because not doing so poses a great risk to the broader community. Although decades of inattention and under-funding for these systems will not be remedied during a national emergency, the responsibility to support these populations is now more critical than ever. Careful consideration of and assistance for these vulnerable communities will be required to achieve a comprehensive and effective public health response.

ACKNOWLEDGMENTS

Only people who have made substantive contributions to the study are included as authors, and all authors have provided consent for their names to be used. The research presented in this paper is that of the authors and does not reflect the official policy of the NIH.

Dr. Rich is supported, in part, by grant P20GM125507 from the NIH.

All authors contributed to the writing and editing of the manuscript of this current issue.


REFERENCES


14. van Boekel LC, Brouwers EP, van Weeghel J, Garretsen HF. Stigma against people who use drugs and other biases of care teams will become more pronounced in stressed and under-resourced hospital settings, thereby impacting allocation of resources and exacerbating existing health inequities.