VIEWPOINT

Ethical Considerations for COVID-19 Vaccine Trials in Correctional Facilities

Emily A. Wang, MD, MAS
SEICHE Center of Health and Justice, Yale School of Medicine, New Haven, Connecticut; and Section of General Internal Medicine, Department of Internal Medicine, Yale School of Medicine, New Haven, Connecticut.

Jonathan Zenilman, MD, PhD
Division of Infection Diseases, Johns Hopkins University School of Medicine, Baltimore, Maryland.

Lauren Brinkley-Rubinstein, PhD
Department of Social Medicine, University of North Carolina, Chapel Hill; and Center for Health Equity Research, University of North Carolina, Chapel Hill.

Viewpoint page 1029

Corresponding Author: Emily Wang, MD, MAS, Yale School of Medicine, Section of General Internal Medicine, 367 Cedar St, Harkness Building A, Ste 410A, New Haven, CT 06511 (emily.wang@yale.edu).

The first phase 3 coronavirus disease 2019 (COVID-19) vaccine trials began in July 2020. China, Britain, and the US have experimental vaccines ready to move into large-scale human testing. In the US, the Vaccine and Treatment Evaluation Units, HIV Prevention Trials Network, AIDS Clinical Trials Group, and HIV Vaccine Trials Network have merged resources into Operation Warp Speed, as each phase 3 trial is anticipated to enroll 30 000 participants. Recruitment for the first US trial involving the Moderna vaccine is targeting participants "at high risk of SARS-CoV-2 infection."[1] However, even though 39 of the 50 largest US outbreaks have occurred in correctional facilities and the case rate of SARS-CoV-2 infection in prisons (3521 per 100 000) has been 5.5 times higher than the general population,[2,3] one key setting in which US investigators will not be recruiting participants for trials of COVID-19 vaccines are prisons and jails. This omission is an example of unintended consequences of well-intentioned policies.

History of Research in Prisons

In 1978, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research instituted a moratorium on research in correctional settings after decades of unethical studies that had enrolled incarcerated individuals into studies that involved testing of drugs and vaccines.[4] At the time, incarcerated individuals were enrolled without informed consent or any federal oversight of studies. Studies that violated ethical standards and were explicitly exploitative of incarcerated individuals were stopped.[5] Subsequently, the commission recommended that research involving prisoners that posed more than minimal risk, was not studying the process of incarceration, and did not directly improve the health or well-being of individual prisoners should not be conducted, unless the reasons for research were compelling. One salient example provided in the report was studies of viral hepatitis, which was highly prevalent among incarcerated individuals. Because of its concern for the ethical principle of justice in clinical research, the commission also indicated that the research would have to satisfy "conditions of equity."[4]

In 2006, the Institute of Medicine (IOM) (now the National Academy of Medicine) revisited the issue at the behest of the US Department of Health and Human Services (DHHS).[6] In its report, the IOM suggested updates to improve the ability of incarcerated individuals to participate in limited clinical studies, particularly those with minimal risk and interventions with demonstrated safety and efficacy, including phase 3 clinical trials. Despite these recommendations, the restrictions on research in correctional settings have not been changed.

Four categories of research are presently permissible in correctional settings (including randomized clinical trials): (1) minimal risk studies on possible causes, effects, and processes of incarceration and of criminal behavior; (2) minimal risk studies of prisons as institutional structures or of prisoners as incarcerated persons; (3) research on conditions particularly affecting prisoners as a class; and (4) research on practices that are intended and deemed likely to improve the health or well-being of participants.[4] However, cumbersome regulations often make conducting scientific investigations challenging in these settings. Currently, federal regulation stipulates that the DHHS secretary must convene a panel of experts before such a trial takes place, thereby creating barriers to conducting clinical research in prisons and jails.

The COVID-19 pandemic provides justification to support reconsideration of the policy to systematically exclude correctional facilities from vaccine trials. Incarcerated individuals and correctional staff are at high risk for COVID-19,[3] and correctional facilities are ideal settings for the spread of respiratory infections. Newly incarcerated individuals and correctional staff frequently enter and exit facilities, social-distancing measures are difficult or impossible to implement, and most correctional facilities are not built to handle large-scale outbreaks of respiratory infection or meet the long-term health care needs of individuals with COVID-19. Furthermore, incarcerated individuals have disproportionately high rates of chronic health conditions such as diabetes, hypertension, and cardiac disease, which are known risks for adverse COVID-19 outcomes and mortality. The death rate from COVID-19 among individuals in state and federal prisons is estimated to be 3 times higher than expected if the age and sex distributions of the US and prison populations were equal.[3]

Given these high exposure risks, a vaccine trial for COVID-19 could meet the criteria of the current DHHS regulations for "research on conditions particularly affecting prisoners as a class."[7] Any trial participation should be voluntary, not tied to any conditions of incarceration or release, and must include informed consent, highlighting the risks and benefits to participation, including the potential toxicities of the vaccine or lack of preventive benefit and potentially the unique risks in the correctional health system of obtaining aftercare. All trials must be approved by an institutional review board (IRB) that has a prisoner representative, and no trial could include more than 50% enrollment of incarcerated people to minimize the potential of exploitation. While the history of clinical trials in US prisons suggests that there is potential and opportunity for coercion in correctional settings, research on this issue in the contemporary era is limited. Qualitative research with incarcerated people participating in clinical trials suggests that their perception of benefits and risks are no different than nonincarcerated participants, with the exception of the perceived benefit of accessing better health care through trial participation.[8]

Any vaccine trials that proceed must acknowledge this potential for coercion, but arguably prevention and treatment of COVID-19 are similarly constrained in the community setting in the US. While prisoners still need to be protected from the risk of coercion and exploitation, respect for prisoners also requires recognition of their autonomy in decision-making, even with true clinical equipoise. An ethical position that could be considered is that because of the epidemiology of this disease, it may be unethical to not provide clinical trial opportunities to these groups.

As COVID-19 vaccine trials have started enrollment, the DHHS secretary should convene a panel of experts to consider the inclusion of incarcerated people in phase 3 trials and consider the following recommendations:

1. Obtain input from currently and formerly incarcerated individuals and those who work in corrections: The IOM report suggested the need for "collaborative responsibility," whereby incarcerated people and correctional staff are involved in the design of research proposals and setting a research agenda. Vaccine trials should be person-centered and acknowledge the unique logistics of conducting research in correctional facilities without impeding good science or violating research ethics. In the longer-term, incarcerated people should also be part of revising regulations of clinical research in correctional facilities.
2. Make racial equity a guiding lens: COVID-19 and incarceration disproportionately affect Black communities. One in 3 Black men will interface with the US prison system in their lifetime (this does not account for time in jail),[9] making vaccine trial data from prisons and jails likely generalizable to the general population of Black men. Recruitment for vaccine trials in prisons and jails may improve participation of racial and ethnic minorities, thereby improving external validity of COVID-19 vaccine trials, which, as of yet, have disproportionately recruited White participants. Clinical trials conducted in the community should obtain permission to follow trial participants into correctional settings, as necessary, to help minimize loss to follow-up among minority participants.[10]
3. Learn from history: The urgency of the current pandemic and of past and future respiratory pandemics may lead to the desire for quick, easier solutions. The present sense of urgency to find a vaccine makes it difficult to take time to support inclusive decision-making and consider long-term consequences. The need for quick results may minimize the interests of vulnerable populations.
4. Ensure receipt of efficacious vaccines and care after the trial concludes: Many correctional settings are not well equipped to deal with screening for and treating COVID-19, much less aftercare following vaccine trials. Inclusion of incarcerated individuals in clinical trials must also include resources for correctional health systems to attend to vaccine complications and, once the trials conclude, universal access to these vaccines.[9] Funding for aftercare, like any community setting, should be guaranteed by the study sponsor and universal access to vaccines proven to be effective and safe should be guaranteed by federal legislation, as there currently is no mandate to provide vaccines to those who are incarcerated.
5. Convene a federal oversight board: Aside from the specific IRB processes outlined in the current regulations, a federal oversight board should be convened that monitors all COVID-19 vaccine trials conducted in correctional settings, regardless of whether the trials are funded by the federal government.
6. Study implementation of vaccines in correctional systems: Implementing clinical trials in correctional facilities, especially in prisons where sentence lengths are typically longer than a year, could help to enable high levels of adherence and follow-up, including antibody testing. However, once efficacious and safe COVID-19 vaccines are developed, additional research will be needed to determine how best to administer and improve uptake of vaccines in correctional systems. In jails where the risk for COVID-19 is still high but the population throughput is much higher, effective strategies for follow-up within the facility and after release must be identified.

Conclusions

Incarcerated people and correctional staff are at high risk of contracting COVID-19. Federal regulations, formed in reaction to previous unethical experimentation, were established to protect incarcerated populations from future mistreatment. However, jails and prisons have become an epicenter of the current pandemic. With appropriate cautions and a person-centered approach, the US research community should revisit whether COVID-19 vaccine trials should include incarcerated individuals and correctional facility staff. Correctional settings present the opportunity to determine vaccine efficacy when trials are ethically conducted and perhaps to the benefit of the health of people who live and work there. Not revisiting the inclusion of these groups in COVID-19 clinical trials presents another set of ethical challenges.

ARTICLE INFORMATION

Published Online: August 17, 2020. doi:10.1001/jama.2020.15589

Conflict of Interest Disclosures: None reported.

Additional Contributions: We acknowledge Tino Negron, a member of the Yale Health Justice Lab, who provided critical input about recommendations put forward in this Viewpoint. He did not receive compensation.

REFERENCES

1. ClinicalTrials.gov. A Study to Evaluate Efficacy, Safety, and Immunogenicity of mRNA-1273 Vaccine in Adults Aged 18 Years and Older to Prevent COVID-19. Accessed July 14, 2020. https://clinicaltrials.gov/ct2/show/NCT04470427#contacts

2. The COVID Prison Project. Accessed July 12, 2020. http://www.covidprisonproject.com

3. Saloner B, Parish K, Ward JA, DiLaura G, Dolovich S. COVID-19 cases and deaths in federal and state prisons. *JAMA*. Published online July 8, 2020. doi:10.1001/jama.2020.12528

4. US Department of Health and Human Services. *The National Commission for The Protection of Humans Subjects of Biomedical and Behavioral Research*. US Dept of Health and Human Services; 1978.

5. Lerner BH. Subjects or objects? prisoners and human experimentation. *N Engl J Med*. 2007;356(18):1806-1807. doi:10.1056/NEJMp068280

6. Gostin LO, Blair P, Cambra S, et al *Ethical Considerations for Research Involving Prisoners*. Washington, DC: National Academies Press; 2006.

7. Protection of Human Subjects. 45 CFR §46.303 (2020).

8. Christopher PP, Stein MD, Johnson JE, et al. Exploitation of prisoners in clinical research. *IRB*. 2016;38(1):7-12.

9. Nellis A, *The Color of Justice: Racial and Ethnic Disparity in State Prisons*. Washington, DC: The Sentencing Project; 2016.

10. Wang EA, Aminawung JA, Wildeman C, Ross JS, Krumholz HM. High incarceration rates among black men enrolled in clinical studies may compromise ability to identify disparities. *Health Aff (Millwood)*. 2014;33(5):848-855. doi:10.1377/hlthaff.2013.1325