COMMENTARY

Mandating Clinician COVID-19 Vaccination May Hinder Population-Level Uptake

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Health care worker vaccine hesitancy has great impact not only on a worker's individual health, but on the health of their patients, patient families, and on a population level. Because voluntary uptake of many vaccines, including the novel SARS coronavirus 2 (COVID-19) mRNA vaccine, has not been sufficient, vaccine mandates for health care workers have been suggested as one mechanism to ensure patient and health worker safety.[1,2] In the current pandemic climate, the question arises: should clinicians, especially those who provide direct patient care, be mandated to get the COVID-19 vaccine? We argue that despite legal precedent for requiring vaccines, setting mandates for COVID-19 vaccines for health care professionals would be detrimental to population-level uptake, a high level of which is necessary to curb the pandemic.[3]

Legal precedent for mandatory vaccinations dates from *Jacobson v Massachusetts* (1905) when the US Supreme Court declared that vaccine mandates were a reasonable requirement to protect public health, public safety, and the common good. This decision challenged the valuing of individual liberty over the common good,[4] a tension that continues to impede a strong federal response to many issues in public health. Yet, more than a century later, this remains the benchmark case for state power to mandate vaccination, a power which has not gone unchallenged.[5,6] Given the global socioeconomic impact of the COVID-19 pandemic, there is, then, legal precedent for mandated COVID-19 vaccination, especially in health care settings. However, the three COVID-19 vaccines currently authorized for use by the FDA have not yet been fully licensed but are approved under an Emergency Use Authorization (EUA). Because an EUA does not require the same level of safety and efficacy data as full FDA approval, mandating vaccines with an EUA may not currently be legally (or ethically) justifiable and may compromise public trust.[3] After COVID-19 vaccines have full Biologics License Application (BLA) approval, mandates may be considered by states and/or healthcare facilities.[7]

Ethical implications of mandating vaccinations have been robustly debated.[5-10] Health care workers have an ethical responsibility to protect the health of patients and populations, as do the institutions in which they work.[11] The American Medical Association (AMA) *Code of Medical Ethics* describes the physician's ethical obligation to protect patients and to do no harm, in part by preventing the spread of disease in their practice settings.[12] Further, it can be argued that health care workers are morally obliged to set a good example of disease prevention for the public, including building trust in the safety and efficacy of vaccines.[3,9,10] Voluntary acceptance of vaccination would fulfill these obligations. Fortunately, most physicians have high COVID-19 vaccination uptake without mandates,[13] but notably, physicians have been more accepting of the vaccine than other health care workers, including nurses and medical assistants.[14,15]

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Influenza, a virus often compared to COVID-19, can also lead to hospitalization and death, yet voluntary uptake by health care workers has not achieved the CDC's 90% goal.[2] As a result, some states have enacted mandates for health care workers; 18 states currently have laws that require influenza vaccination of hospital health care workers, and 11 states require vaccination of ambulatory care facility health care workers.[16,17] Despite the laws' existence, not all enforce demonstration of health worker vaccination or impose consequences for those who abstain.[10] Institutions with influenza vaccine mandates that included consequences for nonadherence resulted in higher rates of vaccine uptake than those without, and institutions in states with health care worker vaccine laws were more likely to implement mandates with consequences.[18] An increasing number of facilities, even in states without formal statutes, are requiring their health care workers, as a condition of employment, be vaccinated against influenza unless medically contraindicated, a move which has significantly increased vaccination rates among health workers.[19,20]

Beyond legal and ethical considerations of health workers and their employers, the tension between mandated health worker vaccination and individual choice has been healthily deliberated in the context of other diseases. Mandates have been shown to increase health care worker vaccine uptake,[19,20] thus protecting health care workers, staff, and patients from the spread of infections, including COVID-19. Increased uptake also reduces illness and absenteeism,[16,21] which can be especially impactful during a crisis. However, mandates can be considered coercive and counter to the deeply embedded cultural and political values of individual choice. A study of health care workers at one institution found that the most frequently reported reason for refusal of the influenza vaccine was a perceived violation of freedom of choice and personal autonomy, and these workers looked unfavorably on vaccine mandates.[23] The burdens already carried by health workers caring for COVID-19 patients is another reason that forcing them to receive the vaccine may not be warranted.[3] Upholding individual free will by protecting the right to vaccination choice can have indirect positive effects, while mandating health care workers to be vaccinated may ultimately undermine trust,[3,10] reinforce public antivaccination sentiment,[9] and inhibit population-level vaccination efforts.[3,24]

While mandates may work in certain sociocultural contexts,[22] in the United States, mandates should be applied with caution. Because mandates can be perceived as antithetical to cultural values of individual freedoms, implementing mandates, even for targeted segments of the population, may unintentionally backfire, like some states' attempts to mandate social distancing and mask wearing. Mandating the COVID-19 vaccine for health care workers may also exacerbate community mistrust; vaccine-hesitant patients may imply a forced nature of vaccination to even those freely choosing to be vaccinated. Scientific and political populism may even lead to weaponization of the mandates by antivaccination groups.[25]

Given the historical and ongoing systematized and structural racism in medicine,[26-28] equity and justice must be part of vaccine mandate decisions. Medical racism, combined with the fraught political context under which the COVID-19 vaccines were developed and authorized,[29] has led some Black physicians and health workers to express COVID-19 vaccine hesitancy, especially during the early clinical trials.[30] Though overall disparities in COVID-19 infection, hospitalization, and mortality rates in the United States extend to Black health care workers, who are more likely to die from COVID than White workers,[31] a recent US study found that Black and Hispanic health care workers had lower vaccine acceptance than Asian or White workers.[14] This may have downstream implications for population uptake, since African-American individuals have significantly higher levels of trust in vaccine advice from race-concordant medical authority figures than discordant.[32,33] Furthermore, the National Medical Association (NMA), a professional society promoting the collective interests of physicians and patients of African descent, conducted their own review of the vaccine trial results before ultimately endorsing the emergency use of the COVID-19 vaccine,[30,34] but the organization has not issued a statement in support of health care worker vaccine mandates.

The most effective vaccine policies to achieve herd immunity during a global pandemic will take into consideration a nuanced analysis of the political and cultural context in which these policies are implemented. Indeed, as an analysis of various European vaccination programs has demonstrated, vaccine policies both reflect and reproduce historically and culturally shaped state-society relationships.[22] Further, vaccination policies can have both mandatory

and voluntary elements,[22] and policies based on arguments that follow a simplistic binary distinction will fail to have the desired effects. For now, we suggest that the implication of COVID-19 vaccine mandates for health care workers should be carefully considered. Vaccine mandates will serve to protect patients and staff only in communities where uptake among health care workers is low. Given the current divisive political environment in the United States, increasingly overt culture wars, historical and ongoing medical racism, and misinformation and antiscience sentiment spreading in unprecedented ways, vaccination mandates, especially at a governmental level, may backfire and should be used judiciously.

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