

COMMENTARY



COVID-19 vaccination: ethical issues regarding mandatory vaccination for healthcare providers

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Introduction

With multiple COVID-19 vaccine candidates in development and the United States Food and Drug Administration (FDA) approval of three vaccines, widespread availability may only be months away. As vaccines become readily available, the ethical dilemma of whether COVID-19 vaccination for Healthcare Providers (HCPs) should be mandated may arise. Considering the critical role of the HCPs for patient care, especially in COVID-19 cases, direct contact with the most vulnerable groups in society, and their potential role in the spread of virus, we argue that there is both a historical precedent and an ethical duty for mandatory COVID-19 vaccination for HCPs.

Historical precedent

The medical field is accustomed to vaccination requirements for employment [1]. The Center for Disease Control (CDC), the World Health Organization, and many professional medical societies recommend that all HCPs are either vaccinated against or demonstrate immunity to multiple diseases. High-income countries tend to have higher vaccination rates and more stringent requirements than low- and middle-income countries (LMICs) [1]. In the United States, individual states have passed laws that encourage HCPs vaccination and require vaccines to be offered to employees, but policies have largely been enacted at an institutional level. Many hospitals require vaccination but allow exemptions for medical, religious, and/or personal reasons. Pre-COVID, institutions necessitated influenza vaccination or a commitment to wear a mask at all times during flu season, some with the threat of a fine if caught without a mask. Employees have been fired for refusing to follow vaccine policy, and few have been successful with litigation [2]. In other high-income countries, such as Japan and Australia, different social interventions



have been implemented to improve vaccination to near-mandatory rates [1]. Of note, many of the required vaccines have been in use for decades, and their associated risks are well-established. However, the consequences of vaccination refusal for other diseases are likely to have a lesser impact on both personal and public health in comparison to COVID-19.

Factors contributing to vaccine hesitancy

In spite of burgeoning excitement regarding COVID-19 vaccine development, some hesitancy has been reported. Multiple factors contribute to hesitancy, including the speed of development, fear of bypassing of regulatory steps due to mounting political pressure, reports of complications and side effects, and the phenomena of disinformation. Each is linked to different types of cognitive bias [3].

The development speed of the COVID-19 vaccines has been unprecedented. Prior knowledge of the coronavirus family of viruses, the evolution of vaccine technology, and significant political pressure and funding have all converged to create an environment where a vaccine could be developed quickly. However, this shortened timeline has led to concerns that the vaccine has not undergone rigorous enough testing to ensure safety [4]. These concerns are evidence of ambiguity aversion, which is the preference to accept a known risk over an unknown risk. In this case, HCPs may prefer the known of the disease over the unknown risk of the vaccine [3].

There is also concern related to potential side effects and complications. No long-term studies of mRNA vaccine safety exist, and only short-term data is available regarding side effects. While local and transient effects, such as injection site soreness, mild fever, dizziness, nausea and fatigue, are expected, they could deepen the concerns of individuals who are already

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vaccine hesitant. Reports of side effects may lead to availability bias, where vivid, negative information clouds the broader benefit of the vaccine [3].

Finally, widespread misinformation has likely contributed to vaccine hesitancy and mistrust. There has been an abundance of false information regarding the COVID-19 pandemic throughout its duration. HCPs have been found to have similar concerns to the general public regarding vaccine safety and efficacy, as well as the severity of the disease [4]. In one Israeli study, the rate of vaccine acceptance was higher in physicians, in internal medicine, and for HCPs who worked with COVID-19 patients. Thus, there may be increased vaccine hesitancy in HCPs with less direct experience with COVID-19. This characteristic may lend itself to optimism bias, where individuals underestimate a particular health risk for themselves and believe the risk is higher for others [3].

Ethical principles in conflict

Field and Caplan argue that the issue of mandatory vaccination sets autonomy (on the side of vaccine refusal) against beneficence, non-maleficence, utilitarianism, and justice [5]. It can be argued that in the dilemma of compulsory vaccination of HCPs specifically, the primary ethical principles in conflict are autonomy and beneficence. The argument for autonomy is weakened by the nature of the profession: HCPs often forgo autonomy for the sake of patients. The argument for beneficence is strengthened by the nature of the profession. HCPs have a duty to serve the sick and vulnerable and to protect the health of their patients. Hospitals enact many policies that reduce individual autonomy for the sake of patient beneficence, including other vaccine requirements, personal protective equipment, safety protocols, uniforms, and general codes of conduct [3]. These measures undoubtedly affect autonomy across a spectrum of invasiveness. Consequences of refusing the vaccine may be significantly disruptive or limiting to autonomy (i.e. inability to travel within the country or overseas, visit high risk patients, confinement of practice to virtual visits only), which essentially render it mandatory.

Vaccine acceptance in the medical workforce and beyond

The implementation of mandatory vaccination in HCPs and the response of HCPs may have broader implications for widespread vaccine acceptance in the general public. HCPs can play a large role in public perception through sharing accurate information, encouraging patients to vaccinate, and leading by example through getting vaccinated. Individual

HCPs can also play a role in encouraging other HCPs and hospital employees to get vaccinated, as peer pressure can be a powerful motivator [3]. Other techniques that improve vaccination rates include financial incentives, thoughtful messaging, and pre-commitment to vaccine appointments. HCPs, as politically neutral and generally respected figures, have great potential to improve public vaccination rates through both public and private discourse.

Conclusion

Widespread COVID-19 vaccination should be encouraged, if not overtly mandated, at healthcare institutions around the world. There are multiple factors regarding the COVID-19 pandemic that may contribute to vaccine hesitancy. HCPs have a particular duty to be vaccinated for the sake of the health of their patients, and those with concerns about vaccination may be best addressed through an appeal to beneficence and subtle incentives. Vaccine support amongst HCPs has the potential to positively influence public opinion and hasten the decline of the pandemic.

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