SARS-CoV-2 Vaccine Mandates for Patients on the Kidney Transplant Waitlist
Are They Ethical?

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Introduction

The coronavirus disease 2019 (COVID-19) pandemic has brought worldwide devastation in terms of lives lost and economic hardship, but also in the unanticipated vitriol that has arisen in response to public health measures. Mandates requiring severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) vaccination have been among the most polarizing of these, and the nephrology community is no exception (1). The American Society of Transplantation (AST) and the Canadian Society of Transplantation (CST) strongly recommend SARS-CoV-2 vaccination for all potential transplant recipients but stopped short of mandating it. Many centers now require it. Vaccine mandate proponents and opponents alike have had visceral, emotional reactions, leading to division, discord, and distrust. Before imposing vaccine mandates on patients waiting for a kidney transplant, thoughtful discussion is warranted. Here, we consider both sides, guided by medical ethical constructs (2–4). Our scope pertains to competent adults being considered for nonurgent kidney transplantation.

Respect for Autonomy

An individual has the fundamental right to accept or deny any medical treatment—including vaccination (2). Autonomy is the basis of informed consent and so fundamental to modern medicine that some regard this principle most important (5). As coercion invalidates consent (4), insisting that patients be vaccinated against SARS-CoV-2 or else be denied transplantation infringes on their right to autonomy.

However, an individual’s right to autonomy is not absolute, especially when personal decisions may result in harm to others (2). During a pandemic that has killed >5 million people, personal autonomy may be superseded by interests of the majority. This tension between personal autonomy and the greater good has led to the current chaos, with heated—often violent—disputes between opponents of mandatory public health measures and those imposing them. Some rightfully contend that when personal freedoms are restricted in favor of public health, the burden of proof must lie with those advocating them (3).

Imposed measures must be safe, effective, transparent, and without less restrictive alternatives (6). When masking and social distancing were initially imposed in early 2020, this burden of proof was easier to meet: the benefits to public health in preventing total collapse of the health care system due to COVID-19 were enormous, while the nontrivial restrictions to personal freedoms were thought to be safer, easily reversible, and temporary. What about now? Do pretransplant vaccine mandates effectively protect the well-being of the majority? Although unvaccinated patients may pose risks to health care workers and other patients during transplant surgery, denying transplantation does not eliminate risks because these patients still require health care, including dialysis. In regions with herd immunity and/or low COVID-19 prevalence, it is difficult to argue that an individual’s right to refuse vaccination is superseded by the need to protect others, especially when social distancing and masking are maintained.

Importantly, any restrictions to personal autonomy must be deemed proportionate to the threats to public health averted by those restrictions (proportionality) (3). Consider an unvaccinated woman who has complied with all previous pretransplant requirements and waited her “turn” for years. Is her removal from the waiting list a just and proportionate response to the public health benefits derived from removing her? Are risks to her health of remaining on dialysis greater than the risk she poses to the public in not being vaccinated? Ultimately, to accept vaccination or be denied kidney transplantation in this context is ethically questionable, yet they have been used even in life-threatening circumstances (7).

Nonmaleficence and Beneficence

This means that all medical treatments should aim to minimize patient harm and maximize patient benefit (2,4). Kidney transplantation carries substantial health benefits over dialysis, but potential recipients undergo extensive workup and treatment of underlying conditions to reduce adverse events post-transplantation. Unvaccinated kidney transplant recipients who develop COVID-19 have a mortality of 20%–40% (8), and SARS-
CoV-2 vaccination is far less effective after kidney transplantation than during dialysis (9). To offer kidney transplantation without SARS-CoV-2 vaccination is akin to boating in rough waters without a life jacket, and vaccine mandates have thus garnered support in some centers.

Do vaccine mandates have harms? If vaccination causes death, even infrequently, denying patients’ rights to equal health care unless they accept risks they may otherwise refuse is problematic. Fortunately, serious side effects after SARS-CoV-2 vaccination are rare and less than the risk of dying from COVID-19 while immunosuppressed (8). Immune sensitization after vaccination is also considered improbable.

Rather, the potential harm lies in forcing patients who refuse vaccination to remain on dialysis, denying them the opportunity for improved health that a kidney transplant offers. Unless being unvaccinated irrefutably results in high risk of personal harm (as with active cancer or infection), it cannot be reasonably considered an absolute contraindication to transplantation. Nonmaleficence and beneficence require global consideration of risk-benefit (2), and therefore, an individual’s risk of acquiring and dying from COVID-19 or other conditions while unvaccinated post-transplantation must be weighed against the morbidity and mortality risk of remaining on dialysis also unvaccinated. This deliberation becomes crucial as local virus prevalence falls, as effective treatments for COVID-19 are developed, and as continued vaccine efficacy against emerging SARS-CoV-2 variants, such as omicron, is unknown. Risk-benefit is neither static nor uniform, and its proper assessment requires flexibility for repeated and individualized evaluation, similar to evaluation processes for non–COVID-19 risks. Such flexibility runs contrary to vaccine mandates. Vaccine mandates also become harmful when they undermine patients’ trust in providers, compromising care. When vaccine politicization leads providers to pass vicious judgments on unvaccinated patients on social media, these harms are compounded.

**Justice**

Justice commonly concerns the equitable distribution of scarce resources to optimize population health or health maximization (3). Given their scarcity, donor kidneys are allocated to patients with the best chances of graft and overall survival. Medication nonadherence contraindicates transplantation as without immunosuppression, graft loss is almost certain. Kidney graft loss from COVID-19–related complications could theoretically be minimized by mandatory SARS-CoV-2 vaccination, maximizing population health. Although valid, this reasoning is only applicable if viral transmission rates are high, if vaccines are effective, if no effective COVID-19 treatments exist, and if appraised against loss of autonomy. Vaccine refusal is thus not the same as medication nonadherence unless risks of graft loss are comparable.

Justice also denotes minimizing health inequities so that no one is unfairly disadvantaged (3). People of color, indigenous populations, and those from low socioeconomic groups experience reduced access to kidney transplantation compared with others, and also have lower vaccine uptake (10,11). Vaccine mandates may further restrict these groups’ access to transplantation, making them unjust. Health inequity may be promoted when only some centers impose vaccine mandates, as those patients with means can relocate and seek transplantation elsewhere. Vaccine mandates are also not possible in low- to middle-income countries with variable supply.

**Discussion**

As SARS-CoV-2 vaccination before kidney transplantation is unequivocally safe and reduces the risk of deadly COVID-19, it should be actively promoted. On the basis of the principle of least coercion (6), education and dialogue should occur, not mandates. Although our sense of fairness and solidarity may be eroded when people do not participate in public health measures equally, our role as physicians is not to “punish” vulnerable patients by denying them health care. Patients should be apolitically counseled as they are for other pretransplant requirements, with time taken to understand and address their reasons for vaccine hesitancy—some of which may be rooted in strong rationale (11). This applies equally to family members and caregivers. For patients who still refuse vaccination, the decision to undertake transplantation or not should remain flexible on the basis of assessment of individual risk-benefit rather than on mandates.

If centers do choose to implement vaccine mandates, all decisions should follow the transparency principle (6). For example, whether it is decided that local transmission risk of COVID-19 is unacceptably high or that health maximization supplants patient autonomy, decisions should involve consultation of all key stakeholders, be free of influence, and be publicly documented.

The United Nations Declaration of Human Rights and the World Health Organization Constitution state that every human has the right to nonjudgmental health care, including individuals who make ill-advised medical decisions. Personal autonomy can be superseded by mandatory public measures if (1) absence of measures poses significant risk to others; (2) the measures are safe, effective, transparent, and the least restrictive possible (6); and (3) the penalty for nonadherence is proportionate. When resources are scarce, policies maximizing population over individual health may be enacted provided that equitable access is maintained. When these criteria are met, policies should be set by national, provincial, or state public health officials to ensure consistency, as delegating decisions to local centers may cause confusion and inequity and may undermine patient trust if their physician is conflicted between developing policy to protect the majority and advocating for them individually.

CST and AST have chosen not to mandate vaccination before kidney transplantation, suggesting that the above criteria have not been adequately met. Specifically, others are not incrementally harmed when unvaccinated patients on dialysis receive a transplant, less coercive measures exist, and the penalty of being denied a life-extending organ if vaccination is refused may cause the patient harm. The risk that vaccine mandates may unjustly limit access to transplantation of underprivileged groups also requires careful evaluation.

As nephrologists, we must use our position, knowledge, and influence to advocate for our patients. We must strive to ensure that our decisions are on the basis of science and ethics and free of political pressure in order to maintain patients’ trust in us and achieve the best outcomes possible.
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Author Contributions
R.S. Suri and L. Gunaratnam conceptualized the work; F. Tallaa, L. Gunaratnam, and R.S. Suri performed literature and media article review; R.S. Suri provided supervision; R.S. Suri and F. Tallaa wrote the original draft; and L. Gunaratnam, R.S. Suri, and F. Tallaa reviewed and edited the manuscript.

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