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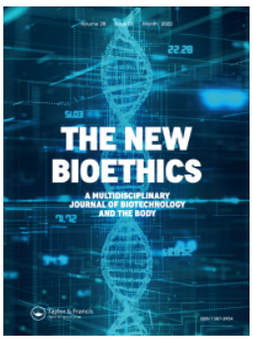

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COVID-19 Vaccination Should not be Mandatory for Health and Social Care Workers

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A COVID-19 vaccine mandate is being introduced for health and social care workers in England, and those refusing to comply will either be redeployed or have their employment terminated. We argue that COVID-19 vaccination should not be mandatory for these workers for several reasons. First, it ignores their genuine concerns, and fails to respect their moral integrity and bodily autonomy. Second, it risks causing psychological reactance, potentially worsening vaccine hesitancy. Third, Black and minority ethnic workers are less likely to have been vaccinated and therefore may be disproportionately impacted by the implications of the mandate. Fourth, a mandate could have a significant negative effect on service provision. Fifth, waning immunity and new variants mean that booster doses are increasingly likely to be regularly required, meaning that what constitutes being 'fully vaccinated' will be a constantly shifting target. Finally, vaccine mandates may have an adverse effect on health and social care recruitment. We argue that daily rapid antigen testing is a viable alternative to a vaccine mandate that is non-coercive and fair. This could also be supplemented by monetary incentives to be vaccinated.

KEYWORDS COVID-19, Mandatory vaccination, Autonomy, Patient Safety

Introduction

In November 2021 the UK Health Secretary Sajid Javid announced that all health and social care workers in England will have to be fully vaccinated against COVID-

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19 by no later than 1 April 2022 (Department of Health and Social Care 2021a). Being vaccinated will become a condition of deployment and those that remain unvaccinated, subject to limited exemptions[1], must be redeployed—forfeiting their patient-facing role—and risk losing their job. In response to the Government's public consultation, 41% of managers of health and social care services or organizations stated that they would terminate the employment of unvaccinated staff, whilst 29% would redeploy them (Department of Health and Social Care 2021b). However, even where there is an intention to redeploy unvaccinated workers it may not always be feasible to do so. The scope of this legislation[2] includes hospitals, GP practices, dentists, and community services that require that care take place in an individual's home, irrespective of whether it is privately or publicly funded. Importantly, the COVID-19 vaccine mandate covers anyone who undertakes Care Quality Commission (CQC) regulated activity and therefore also includes students or trainees, volunteers, and agency or locum staff (NHS England 2021a).

We believe it is highly important for health and social care workers to be fully vaccinated against COVID-19, including any additional doses that are supported by the emerging evidence. We also recognize that mandatory vaccination policies can be effective in increasing vaccine uptake (Lytras et al. 2016). However, mandatory vaccination policies are coercive—and a coercive measure is one that 'involves the restriction of freedom (reduction of options), which causes that person to do what she does not want to do' (Savulescu 2015). Bradfield and Giubilini (2021) define coercion to mean that refusal is 'rendered difficult or is practically unavailable by the imposition of penalties'. The risk of losing one's job is clearly coercive by either definition.

Daniel Sokol (2021) recently argued that the vaccine mandate is a 'minor infringement' that is justified to protect others' health and uses France as an example of a successful vaccine mandate, boosting vaccination rates from 60% to 99%. However, Sokol does not demonstrate that this could not have been achieved by other means—after all, 90% of NHS staff had already received two doses before the mandate was announced (Rimmer 2021). Furthermore, success in France does not necessarily entail success elsewhere, and their vaccine mandate still resulted in the suspension of 3,000 staff without pay who refused to comply (Willsher 2021). Also, it is important to note that Sokol's assessment that the vaccine mandate is a 'minor infringement' is subjective—many thousands of frontline workers do not consider it minor, and have been and are willing to lose their jobs.

It could be argued that a precedent for mandatory vaccination already exists, as healthcare workers performing exposure-prone procedures are already required to be vaccinated against seriously communicable diseases like Hepatitis B and tuberculosis. However, these vaccinations may be a requirement of an NHS Trust's occupational health policy, but they are not legally required (Wise 2021), and healthcare workers are at liberty to refuse (Health and safety Executive n.d). This can restrict

[1] This includes those under the age of 18; those that are clinically exempt from COVID-19 vaccination; those currently undertaking a clinical trial for a COVID-19; and those that do not have direct face-to-face contact with a patient/service user.

[2] The COVID-19 mandate for care home workers came into force on 11 November 2021.

them from working in certain clinical areas, but it does not rule out caring for patients. This is what makes the COVID-19 vaccination mandate both unique and controversial.

Because the proposed vaccine mandate is so clearly coercive, a strong justification must be offered in its favour, and there must be no reasonable non-coercive alternative. Below we outline a number of reasons to oppose the COVID-19 vaccine mandate for health and social care workers in England, and argue that there are reasonable alternatives.

Reasons against mandates

There are numerous reasons why we believe that COVID-19 vaccination should not be mandatory for health and social care workers. First, many healthcare workers have considered reasons for vaccine hesitancy and refusal, such as concerns about the vaccine's effectiveness, efficacy, and side-effects; ethical objections, distrust of government, pharmaceutical companies[3], and public health experts (Li et al. 2021, Rodger 2021, Mallapaty 2021, Pruski 2021; Hurford 2021). Although we believe that the evidence clearly shows the very small risk of harm from vaccines is considerably outweighed by the potential benefits to individuals and the wider community, we should not ignore those who disagree. Attempting to override their concerns with the threat of redeployment and job loss shows insufficient regard for their moral integrity or their bodily autonomy. There is nothing minor about infringing someone's bodily autonomy and freedom, and therefore the necessity for doing so must be manifestly demonstrated. Sokol (2021) states that this infringement is justified to protect the health of others, and although he considers and dismisses 'gentler ways to persuade' he fails to seriously consider other viable less restrictive alternatives, examples of which we discuss below. Making a health intervention legally mandatory for a group of people should be treated as a last resort and therefore any concerns about it should not be easily dismissed.

Second, a vaccine mandate risks eliciting psychological reactance, exhibition of anger and negative cognitions by individuals in response to a loss of freedom or of limited alternatives. Among frontline workers this could reinforce and even increase vaccine hesitancy towards COVID-19 vaccination as well as other unrelated vaccines (Sprengholz et al. 2021).

Third, perhaps as a result of past unethical practices that have damaged trust, such as the infamous Tuskegee syphilis trials, Black and minority ethnic NHS staff are less likely than other staff to have been vaccinated against COVID-19 (Kadambari and Vanderslott 2021, Iacobucci 2021). If they are similarly less likely to comply even with a mandate, they will be disproportionately impacted by the government's policy. Should this be the case, areas with the most diverse workforces are therefore more likely to be adversely affected by April 2022.

[3] This is not without justification given the recent allegations surrounding poor practices, concerns about data integrity, and regulatory oversight during the testing of Pfizer's vaccine (Thacker 2021). Nevertheless, despite these concerning allegations, the Pfizer-BioNTech COVID-19 vaccine has been shown to provide significant protection from severe disease.

As of November 30th, 2021 more than 15% (31,159) of NHS health care workers in London had not been fully vaccinated (NHS England 2021b). This number may also include those who are not necessarily frontline workers but may have patient contact but are nonetheless within the scope of the government's vaccination mandate. Moreover, the data does not include agency or NHS bank staff who make up a significant proportion of staff in some NHS Trusts. It is estimated that 76% of registered nurse vacancies and 80% of doctor vacancies are filled by temporary agency or bank staff at any given time (Rolewicz and Palmer 2019). Having lower vaccine rates for Black and minority ethnic background staff is particularly concerning for two important reasons: first, healthcare workers are seven times more likely to have severe COVID-19 infection; and second, Black and minority ethnic NHS staff—due to complex social and biological factors—are disproportionately susceptible to severe disease and poor outcomes (Mutambudzi et al. 2021, Phiri et al. 2021). These should be strong motivational factors for all healthcare workers to get vaccinated without resorting to restricting an individual's freedom to choose under the threat of job loss.

Fourth, a mandate could have a significant effect on service provision, as more than 100,000 NHS staff have not been fully vaccinated. The pandemic has already put hospitals under severe pressure—frontline workers describe themselves as 'exhausted' (Royal College of Physicians 2021). There is already an acute shortage of nurses, with almost 39,000 vacancies in England and on average 105,000 adult social care vacancies per day (Skills for Care 2021). Several hundred care homes have already had to stop accepting new admissions due to unprecedented staff shortages, and up to 50,000 care home staff may be unable to work because of the vaccine mandate (Booth 2021). The additional impact of such a mandate is likely to be severe in both hospitals and care homes. Care homes have already had to refuse NHS requests to discharge patients into their care because of staffing issues caused by the mandatory vaccine requirement—this is likely to worsen over the winter period (Thomas 2021). This is not an isolated issue—there has been a significant increase in the number of times NHS Trusts in England could not discharge a patient despite meeting the discharge criteria. In February 2021 compared to November 2021 there was an 80% increase from 223,593–402,211 and this was primarily due to insufficient adult social care and community health provision (Jayanetti 2021). This all contributes to a growing backlog of care—increased emergency department waiting times, cancelled elective surgery, and delayed transfers of care (British Medical Association 2021). These concerns are echoed by the managers of health and social care providers—in response to the government's public consultation, more than 60% stated that they believed the vaccine mandate would compromise their ability to provide safe patient care. Of those that were concerned, nearly 80% believed it would have a severe or major impact (Department of Health and Social Care 2021b).

Because resources are already stretched, it will only take a small percentage of health and social care workers to remain unvaccinated to have a significant impact on healthcare provision. There is strong evidence showing that lower staffing levels are associated with increased inpatient mortality (Griffiths et al. 2019). The House of Lords Secondary Legislation Scrutiny Committee (2021) have

detailed their concerns about the COVID-19 vaccine mandates effects on staffing and estimate that 5.4% (126,000) of staff will remain non-compliant by the April 2022 deadline, with an estimated cost of £270 million to train and recruit their replacements. Consequently, we should be extremely cautious about implementing a policy that could further compromise staffing levels.

Fifth, the current COVID-19 vaccine mandate in England does not currently include COVID-19 booster doses. However, immunity conferred by current vaccines wanes rapidly; six-months after vaccination, healthcare workers without boosters have similar immunity to the unvaccinated who have previously been infected, and therefore pose a similar risk (Tartof et al. 2021, Naaber et al. 2021, Hogan et al. 2021). Italy was one of the first countries to make COVID-19 vaccination mandatory for healthcare workers, and yet between September and November 2021 there was a 192% increase in the number of infections amongst healthcare workers (The Local Italy 2021). As a result, Italy is now considering making a third booster dose mandatory (. Data published in early December 2021 has shown that a third dose provides an enhanced level of protection against hospital admission, severe disease, and death from COVID-19—though it remains uncertain how long this will last (Barda et al. 2021). If the government's COVID-19 vaccine mandate is intended to be evidence-driven, it must require subsequent booster doses to maintain high levels of protection. As a result, the goal of having health and social care workers 'fully vaccinated' is a continuously moving target, and their employment or deployment will remain contingent on their continued willingness to accept additional doses that are deemed necessary.[4]

Finally, given that the rates of vaccine hesitancy are very high among young people (Fazel et al. 2021), the impact of the vaccine mandate on university enrolments and NHS workforce recruitment should also be considered. It may discourage some individuals from pursuing a career in healthcare, particularly if mandates will be in place for the long-term and remain a condition for employment and deployment in a patient-facing role. Moreover, this also has implications for medical, nursing, midwifery, and allied health students who are also expected to be fully vaccinated by the April 2022 deadline. Following the initial government announcement, the Department of Health and Social Care informed the Medical Schools Council (2021) that healthcare students undertaking CQC regulated activities are within the scope of the mandatory vaccination policy and are expected—unless medically exempt—to be fully vaccinated by the same deadline. The implications of this are that any healthcare student that remains unvaccinated by this time will not be able to complete their course because they will not be able to access their mandatory clinical placements, which will only be accessible to 'fully vaccinated' students. Therefore, those students who choose to remain unvaccinated may find themselves with significant debt, without a degree, or with a degree that will not permit professional registration with the Nursing and Midwifery Council,

[4] The strategy of potentially indefinite booster doses for health and social care workers is not without risk. For example, it further worsens global vaccine access inequality, exacerbates health disparities, and compromises vaccine distribution in low- and middle-income countries. Arguably, greater health benefits would be accrued by ensuring low- and middle-income countries have access to COVID-19 vaccines instead of providing high-income countries additional doses—especially when two doses still provide a degree of protection from severe disease.

Health and Care Professions Council, or General Medical Council. Many students will be in their final year and at the time of the deadline will be just a few months short of completing their degree. This may be particularly egregious for students who have previously recovered from COVID-19 infection—within the last 10-months prior to the April 2022 deadline—since they will likely pose no greater risk to patients (Kojima and Klausner 2022) than students that have received two vaccination doses.

Alternatives to covid-19 vaccine mandates

Given the case we have outlined against mandatory vaccine policies, we need to consider alternative approaches that do not involve mandates. Sokol (2021) has argued that healthcare workers have an ethical obligation to be vaccinated to protect the health of others, and that the circumstances justify the imposition of a mandate, despite the disadvantages. Alberto Giubilini (2019) suggests utilizing the principle of the least restrictive alternative, which requires the least restrictive public health policy to be preferred over those that result in greater restrictions of individual autonomy. Giubilini (2019) proposes an intervention ladder that ranks a range of vaccination policies from the least to the most restrictive. He ranks his intervention ladder in the following order: persuasion, nudging, provision of incentives, withholding of financial benefits, imposition of financial penalties, mandatory vaccination, and compulsory[5] vaccination as a last resort. Of course, given the responsibilities and duty of care that health and social care workers have towards their patients, the steps in Giubilini's ladder might be justifiably escalated quicker for them than for the general public.

When proposing alternative policies to mandates, it is important to demonstrate that these policies will not result in higher risks of infection for patients. There are a number of key considerations. First, as we have noted, the protection against infection that vaccines offer wanes fairly quickly. For example, a recent study showed that the efficacy of the Pfizer–BioNTech vaccine against the Delta variant declined from 93% to 53% after four months (Tartof et al. 2021). This means breakthrough infections are increasingly likely over time to occur amongst vaccinated staff. Second, if infected, the likelihood of transmitting the Delta variant to others differs little from someone who is unvaccinated (Singanayagam et al. 2021). So, vaccinated workers, although less likely overall to transmit COVID-19 to close contacts than unvaccinated workers, still have a significant chance of doing so—including to vaccinated colleagues and patients.

Third, there is a further risk factor for vaccinated workers who are not regularly tested. The latent—or pre-infectious—period of SARS-CoV-2 averages 3.3 days, while the incubation period averages 6.8 days (Zhao et al. 2021). If vaccinated workers have breakthrough infections, after the latent period and before the end of incubation, a period of at least three days, they may be unknowingly infectious in the workplace. Further, a significant proportion of vaccinated workers will

[5] In Giubilini's ladder, 'mandatory' means required for an activity such as school attendance, while 'compulsory' means a legal requirement to be vaccinated (Giubilini 2019). The latter is more coercive.

exhibit no symptoms and be unknowingly infectious for much longer. This risk factor increases as new variants develop that have increased transmissibility and that present with different symptoms, such as the recently discovered Omicron variant. Preliminary data indicates it is significantly more transmissible than previous variants (University of Hong Kong 2021), with cold-like symptoms like a runny nose, headache, fatigue (either mild or severe), sneezing, and a sore throat being the most commonly reported (ZOE COVID Study 2021). As the pandemic continues, vaccinated workers may be increasingly likely to attribute such symptoms to something other than COVID-19.

Finally, it is also important to note that infection-acquired immunity offers a high degree of protection from reinfection that remains strong and persists for at least 10 months (Kojima and Klausner 2022).[6] A significant proportion of NHS staff already have a degree of infection-acquired immunity from previous COVID-19 infection (Coltart et al. 2021). This provides a rationale for treating individuals that have recovered from COVID-19 infection equally to those that have been fully vaccinated, at least for an agreed time period that is congruent with the emerging evidence. This further diminishes the case for coercive vaccination policies for those that have previously recovered from COVID-19 infection.

To summarize, individuals have a highly varied level of immunity to COVID-19 infection, depending on when they were vaccinated, the additional doses they have received, and whether or not they have previously been infected. Immunity also varies with age (Bartleson et al. 2021). This points to a more equitable alternative—daily rapid antigen testing.

Daily rapid antigen testing

If unvaccinated workers are required to undergo a daily rapid antigen testing regime, most infections would be quickly detected, even though these tests are considerably less accurate than PCR tests (Allan-Blitz and Klausner 2021). Their higher false positive rate is not a major issue when the alternative is that a significant number of workers can no longer be deployed or have their employment ceased. We have already noted that vaccinated workers, if they contract COVID-19, could potentially be infectious in the workplace for a minimum of three days and possibly much longer if they are asymptomatic. It is therefore possible that unvaccinated workers—in this scenario—who are tested daily may pose a *lesser* risk than vaccinated workers taking twice weekly tests (current practice for asymptomatic NHS staff in England), particularly as the latter group's immunity wanes. The Liverpool City Region Covid-SMART asymptomatic testing programme has already shown that daily rapid antigen testing is effective in detecting asymptomatic cases (Institute of Population Health 2021).

Importantly, preliminary data indicates that the vaccines are far less effective in preventing transmission of the new Omicron variant (Gardner and Kilpatrick 2021), and even three doses may be insufficient to prevent infection and

[6] However, the degree of protection against reinfection and serious disease that previous COVID-19 infection provides is likely to change as new variants emerge.

symptomatic disease (Kuhlmann et al. 2021). Furthermore, data from South Africa indicates Omicron may result in less severe disease compared to Delta resulting in fewer hospital admissions and lower intensive care bed occupancy (Wolter et al. 2021, Dyer 2021). If proven, these factors may weaken the case for mandatory vaccination policies, as it further narrows the risk that vaccinated and unvaccinated health and social care workers pose. Therefore, before imposing a punitive mandatory vaccine policy, it is incumbent on the government to clearly demonstrate that unvaccinated workers who are tested regularly pose a significantly higher risk than those who are vaccinated.

Given that vaccinated workers still pose a risk to patients and the issues associated with mandates, it is more equitable to require all health and social care workers, both vaccinated and unvaccinated, to undertake daily rapid antigen testing.

Monetary incentives

Even if daily antigen testing is mandated, it is still preferable that all health and social care staff are vaccinated. One way to encourage a higher vaccine uptake is to offer monetary incentives. There is some evidence that even very small monetary incentives can increase COVID-19 vaccination rates (Campos-Mercade et al. 2021). For example, nudging healthcare workers using monetary incentives could be used to encourage vaccination through a weekly staff lottery or a one-off payment of £500 – £1000. A weekly lottery could be implemented alongside or instead of one-off payments—staff must opt-in and upon receiving a first, second, or third booster dose during that period become eligible to be included in the lottery and to be awarded a significant monetary payment. The cost of either monetary incentive is easily offset by the estimated costs associated with recruiting a new member of staff, which are estimated to be in excess of £5,000 for UK-based nurses, and more than £10,000 to recruit an international nurse (Kline and Lewis 2019, Palmer et al. 2021).

There are several objections that could be raised against monetary incentives, however. They may cause resentment amongst vaccinated staff, and may encourage more healthcare workers in the future to wait for an incentive to be offered for booster shots. They could be potentially coercive for those healthcare workers for whom the incentive may ease some economic stress (Largent and Miller 2021; Jecker 2021). However, Largent and Miller (2021) point out that coercion involves a threat, and that is not the case here—in fact, as we have discussed, vaccine mandates are coercive, not monetary incentives. Savulescu agrees, arguing that using monetary incentives leaves workers free to refuse without the loss of some freedom or other good (2021). A related objection is that monetary incentives do not respect the moral integrity of staff. Again, we do not believe monetary incentives of the size we have proposed are significant enough to do so—they are intended to persuade the hesitant, not those with serious moral concerns regarding the vaccine.

We do not suggest monetary incentives should be the primary method of increasing vaccine uptake. Health and social care providers should give staff every opportunity to address concerns, discuss risks, and answer questions, without feeling like

they are being pressured into being vaccinated. Providers with high rates of vaccine hesitant staff could also consider employing full-time staff with public health expertise to spend time dialoguing with workers. The cost of their employment would be easily offset by the savings incurred by persuading vaccine hesitant workers that the benefits of getting vaccinated far outweigh the perceived risks.

Conclusion

Although it is strongly preferable that all health and social care workers are vaccinated against COVID-19, it is also clear that many are hesitant, and some will refuse altogether. Given that the healthcare system is already under severe strain, the impact of losing potentially thousands of staff would be significant. Mandating a vaccine to remain employed or deployed in a patient-facing role also disregards health and social care workers' moral integrity and bodily autonomy, and will cause considerable distress for many. Furthermore, it ignores those workers with infection-acquired immunity, and alternatives such as daily rapid antigen testing that can help to minimize the risks that asymptomatic unvaccinated and vaccinated workers pose to patients and colleagues. Given the already high vaccination rates amongst NHS staff, it is by no means obvious that the individual and societal costs associated with mandatory COVID-19 vaccination outweigh the marginal gains from vaccinating the remaining minority, provided alternatives such as regular testing are employed. Immunity is already a constantly moving target, and if vaccines prove to be less effective in preventing transmission of the new Omicron variant and future variants, this further weakens the case for mandatory vaccination policies. We believe that instead of imposing punitive measures, positive incentives to be vaccinated should be offered instead. This could include employing public health experts in health and social care settings with high rates of vaccine hesitant workers to engage in regular dialogue, or even monetary incentives.

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