Mandatory vaccination against COVID-19 for health and social care workers caring for older people

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Abstract

The COVID-19 pandemic has particularly adversely affected older people with frailty and functional dependency. Essential regular contact with care staff has been evidenced as an important source of infection for this group. Vaccinating care staff can reduce the incidence, duration and severity of infection, preventing onward transmission to older people and minimising the harm associated with discontinuity caused by staff absence. Voluntary vaccination programmes for staff are more likely to be effective when associated with information and education, community engagement and financial incentives but programmes using all of these approaches have failed to establish consistently high vaccination rates in care staff during the pandemic. Mandatory vaccination, proposed as a solution in some countries, can increase vaccination rates. It is only ethical if a vaccine is effective and cost-effective, the risk associated with vaccinating care workers is proportionate to the risk reduction achieved through vaccination, and where all efforts to encourage voluntary vaccination have been exhausted. Even when these conditions have been met, careful attention is required to ensure that the penalties associated with conscientious objection are proportionate, and to ensure that implementation is equitable, in a way that does not disadvantage particular groups of staff.

Introduction

Older people living with frailty have been particularly at risk of adverse outcomes during the COVID-19 pandemic[1,2]. An important contributor to spread has been the essential requirement for older people with frailty and disability to have regular close contact with care staff, who have been shown to contribute to outbreaks in care homes [3,4] and hospital [5].

Vaccination of care staff against COVID-19 may protect older care recipients in three ways. Firstly, it reduces the risk of staff becoming infected with SARS-COV-2 [6]. Secondly it reduces the duration and viral load associated with infection, and therefore likelihood of spread [7]. Finally, it reduces the severity of infection and hence service discontinuity associated with prolonged staff absence [8]. There is some limited empirical evidence that COVID vaccination of care home staff reduces infection rates, morbidity and mortality in residents[9]. Modelling suggests that increasing vaccination rates in US care home staff could have prevented 29% of staff and resident infections, and almost half of resident deaths, in areas with low staff vaccination rates during the pandemic[10].

On these grounds, most countries have issued guidelines recommending vaccination of care staff against SARS-COV-2. Despite this, voluntary uptake of vaccination among care staff is variable and incomplete[11][12]. Some countries have responded by mandating care worker vaccination [13–15]. In this paper we consider the case for and against such mandates.

Voluntary vaccination

Obviously, the preferred way to increase vaccination uptake among care staff is through voluntary programmes. There is evidence that information and education, community engagement, and financial incentives can improve vaccination rates[16].

Given the evidence for what works in vaccination programmes, it is imperative that authorities use all such approaches before resorting to mandate. There are, though, limits to what can be achieved in a pandemic context. Devoting time and resource to information programmes and tracking vaccination rates in staff may be challenging whilst maintaining resource-stretched front-line care obligations. A law of diminishing returns applies – with progressively smaller increase in uptake for each additional effort to encourage it. There is also evidence that countries that have deployed evidence-based approaches to maximize vaccine uptake have not met their targets by doing so. In England, for example, a vaccination target of 80% of care home staff was not realized, despite most of the evidence-based approaches to vaccine uptake being deployed[17].

Some arguments in favour of mandatory vaccination

When we speak of a mandatory programme we mean a conditional one in which vaccination is considered to be a requirement for employment – for example, legislation introduced in England in November 2020 (subsequently revoked) required all care home staff, including those without caring roles, to accept vaccination or lose their jobs[17].

Generally people have a moral obligation not to harm each other. When infecting someone else could have been prevented but is not, this can be regarded as harming that person. This is relevant not only in cases where one knows oneself to be infected but also when one is not aware of being infected and transmission may be prevented by taking general preventive measures. If the duty not to infect others is held by all individuals, then this will certainly be important for care staff, since promotion of health and wellbeing is central to the culture of organisations and individuals providing care.

Some arguments against mandatory vaccination

Mandatory vaccination programs involve constraints to personal autonomy and freedom of choice. The least that can be said is that strong justification is needed for such constraints to be morally acceptable. To be justifiable, a mandatory programme of COVID-19 vaccination for care workers must meet all of the following conditions:

- the efficacy and cost-effectiveness of care worker vaccination is sufficiently demonstrated
- proportionality: vaccination of care workers results in a considerable additional protection of care recipients that cannot be realised by vaccinating care recipients alone
- subsidiarity: strategies to raise voluntary uptake of vaccination have been sufficiently demonstrated to fail

How people understand and interpret risk

The benefits of COVID-19 vaccination strongly outweigh the risks at a population level[18] but this discussion becomes more nuanced at an individual level. The risk of myocarditis and myopericarditis following vaccination is higher, for example, in adolescents and working age adults than older people – although it remains low overall[19]. Meanwhile the risk of developing life-threatening COVID-19 in younger adults is low by comparison with older cohorts[20]. The fact that each SARS-COV-2 variant differs with regard to morbidity and mortality, and response to vaccination, makes this even more complex. Clearly, for healthy younger adults, many of whom make up the care workforce, the benefits and risks of COVID vaccination are more finely balanced than in older populations with long-term conditions and frailty.

The weight attached to risks and what comprises an “acceptable” risk is highly individualised. Moreover, there is substantial variation in the extent to which individuals are prepared to

adopt a collectivist philosophy, accepting some individual risk in order to protect more vulnerable citizens ("the greater good"). Affinity to concepts such as herd immunity is dependent on an understanding of how individual behaviour affects the collective and vice versa. Given that these principles are not universally accepted or agreed, it is likely that there will always be conscientious objectors to mandatory vaccination.

What consequences conscientious objectors should face as part of mandatory vaccination requires careful calibration if programmes are to be effective. Clearly, little or no consequence is unlikely to persuade people to change their behaviour, especially if the criterion of subsidiarity has been met, with all means of persuasion deployed prior to mandate. There is some evidence, from other diseases, that financial penalties, such as loss of income, may help persuade people to take a vaccine[21].

Ethical implementation of mandatory vaccination

Even where a case can be made that the above conditions – efficacy, proportionality and subsidiarity – have been met to justify mandatory vaccination for a given group of staff, principles of equity and justice can be challenged by how such policies are implemented. An important example comes from England, where a vaccine mandate for care home staff was implemented whilst no such policy came into place for NHS staff [22].

Mandatory vaccination of care home staff was arguably justifiable when considered in isolation. This was the care setting where there was most evidence that staff infections had caused harm, enabling a case around efficacy and proportionality to be made. Government had devoted significant resource to maximising vaccine uptake, addressing the issue of subsidiarity. However, differential vaccination policies between care homes and the NHS meant that vaccination was imposed on the lowest paid, most understaffed and most financially precarious part of the health and social care system. Workers in care homes are more likely to be female, from a minority ethnic background, and less likely to be university educated or hold professional registration than NHS counterparts[23]. At a practical level, this incentivised care home staff wishing to avoid mandatory vaccination to leave social care[23]. Thus, the broader context raises substantial concerns around the approach taken.

Do mandates work?

The evidence from both COVID and non-COVID contexts is that thoughtfully implemented vaccine mandates increase uptake rates[21]. However this observation seems to be both setting and context dependent – in terms of the form of mandate adopted, the vaccine and medical condition under consideration, and the number of times vaccination has to be

repeated in order to be effective. For vaccines implemented as a consequence of employment, it's possible that increased vaccination rates are at the expense of some employees leaving, or refusing to join, the workforce. Unvaccinated staff leaving the workforce may protect care recipients from infection but expose them to harm from staff shortages. The unvaccinated staff, meanwhile, remain unprotected from infection even after they have left employment. There are multiple possible losers in this scenario.

The question is whether increases in vaccination rates following introduction of a mandatory vaccination makes the effort and adverse consequences worthwhile. More data are needed. We must take the opportunity to learn from differences in vaccine policy, within and between jurisdictions during the pandemic, to understand the effectiveness of COVID-19 vaccination mandates in different populations and contexts.

Conclusion

COVID-19 vaccination is likely to be part of the health and social care landscape for some time. Mandatory vaccination policies remain in place in several countries. In conclusion we think that national health authorities and organisations caring for older people have the moral responsibility to take every measure possible to maximise care worker vaccine uptake. When vaccination uptake remains below a certain level and criteria of efficacy, subsidiarity and proportionality are met, a mandatory programme may be justified. The main justification stems from the duty of care workers not to harm those under their care. At a population level, vaccination has a favourable balance of benefit (effect) over burdens and risks. Implementation of mandatory vaccination is, however, not without difficulty. Careful attention to proportionate consequences for conscientious objection, and also to avoid unintended consequences of introducing vaccines in an unjust or inequitable way, is required if such a policy is to be ethically justifiable.

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