Does the Duty of Rescue support a moral obligation to vaccinate? Seasonal influenza and the Institutional Duty of Rescue

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ABSTRACT
Seasonal influenza poses a significant public health risk in many countries worldwide. Lower immunity and less influenza virus circulating during the pandemic has resulted in a significant increase in cases since the lifting of COVID-19 restrictions in 2022. The seasonal influenza vaccine offers effective protection and is safe for use in large numbers of the population. This article asserts that a moral obligation to vaccinate against influenza can be understood as an Institutional Duty of Rescue. The traditional understanding of the Duty of Rescue encounters issues with force and scope, making it difficult to apply to rescue cases in general, as well as being overdemanding for the individual agent. An Institutional view of the Duty of Rescue addresses these difficulties, looks at the wider context of rescue and leaves room for discussion on collective, preventative rescue measures. This makes the concept well suited to supporting a moral obligation to vaccinate against influenza as part of a collective effort on the part of institutional organisations.

INTRODUCTION
Due to social isolation measures introduced in 2020 to reduce the spread of COVID-19, there has been much lower levels of other viruses, such as influenza, circulating globally. Less transmission of influenza, along with a decline in the proportion of the population being vaccinated means that immunity to influenza, has been significantly lower than it has been in previous years. With the relaxation of COVID-19 measures, many countries have seen a significant increase in cases of influenza, creating a serious public health concern. This was readily reflected in the UK’s 2022–2023 influenza season data. Nearly 15,000 excess deaths were associated with influenza, the highest figure since 2017–2018. Hospital admissions across all ages were also higher than usual according to the UK Health Security Agency. While there may have been other factors contributing to the increase in deaths and hospital admissions, such as the dominant circulating strain, H3N2, causing more severe disease, lower immunity against influenza has had a significant impact on the rise in cases worldwide. Despite this, the influenza vaccine which was rolled out in the 2022–2023 season was ‘well matched’, helping to cut influenza-related admissions in adults and children.

The increased impact of influenza in the 2022–2023 influenza season highlights the importance of robust vaccination programmes as well as encouraging a high vaccine uptake. Large-scale public health measures aimed at protecting populations from communicable infections like influenza also raise ethical questions, particularly around obligations to vaccinate, how those obligations are to be understood and who they fall on specifically.

This paper will explore the Duty of Rescue as an ethical concept which supports a moral obligation to vaccinate against influenza. It will discuss some of the problems which arise in relation to the traditional understanding of the Duty of Rescue, namely, issues with the duty’s force and scope, as well as the problem of identifying direct rescue in the case of vaccination. It will offer a solution to these obstacles by introducing the concept of an Institutional Duty of Rescue. First proposed by Rulli and Millum, this approach resolves issues seen with the previous understanding of Duty of Rescue, by limiting its force and scope, and reframing the duty so as to place obligations on institutions rather than individual agents. An Institutional Duty of Rescue also allows for a focus on organised preventative rescue, making it suitably placed to support a moral obligation to vaccinate against influenza.

THE DUTY OF RESCUE
Proposed by Singer, the Duty of Rescue asserts that there is a requirement for ‘individuals […] to benefit others, or to prevent harm from others, when doing so entails a small cost to them’. In other words, when we are in a position to rescue someone and the cost to ourselves is small, we are morally required to do so. The child drowning in a pond analogy is often given to demonstrate the Duty of Rescue. Imagine you are walking to work, and you spot a child struggling in a shallow pond. There is no one else nearby, and the child will most certainly drown if someone does not intervene. If you were to rescue the child, the cost to yourself would be very small, you might get your shoes muddy or be 30 minutes later to work. However, if you do not rescue the child, the cost to her will be her life.

High probability of significant harm avoiding benefit for the endangered would suggest that vaccines constitute a rescue measure in a similar way. Empirical evidence demonstrates that vaccines are incredibly effective at preventing death and severe disease from influenza, particularly for vulnerable groups.

Having the vaccine is also generally considered to be low burden to the rescuer, vaccines are easily accessible to most individuals (although there is a small cost to those in the non-eligible groups in the UK), and the risks of actually having the vaccine are...
relatively minor. Most commonly reported side effects include a sore arm, raised temperature and muscle aches. More serious effects have been associated with inoculation. The 2009 swine influenza vaccine Pandemrix was associated with an increase in reports of narcolepsy in children and Guillain-Barré syndrome (GBS), a rare autoimmune condition causing muscle weakness and paralysis, has also been linked to the influenza vaccine. Further studies into the links between the influenza vaccine and GBS have demonstrated that the risk is incredibly small. An analysis of the 2009 N1H1 vaccine programme concluded that the incidence of GBS after vaccination was around 1.6 per million vaccinations, and should not deter people from having the vaccine.10

The influenza vaccine does not come with a zero-risk guarantee, but like much of our advancement in medicine, nothing is completely risk free. Generally speaking, vaccines are low risk and low burden the rescuer.

HIGH-RISK VACCINATION GROUPS
On the grounds of the Duty of Rescue, most individuals have a moral obligation to be vaccinated as a means of rescue. However, vaccination would be high cost to those who are at risk of anaphylactic shock to any of the ingredients in the vaccine, as well as some individuals who are severely immunocompromised. This is particularly the case with the use of live-attenuated vaccines, such as the nasal spray influenza vaccine which is used in children in the UK.11 The small number of individuals for whom vaccination would not be considered low risk would not have the same moral obligation to be vaccinated.

There may also be groups of individuals for whom vaccination would be high cost on religious or philosophical grounds. For example, those with deeply held religious beliefs may be opposed to the use of vaccines produced using cell lines derived from foetal material. For these groups, an obligation to vaccinate could cause significant moral harm.

The influenza vaccine is effective at preventing severe disease from the virus, as well as being generally low risk to the individual. From this perspective, it is possible to suggest that a moral obligation to vaccinate can be explained by the Duty of Rescue. Individual agents are suitably positioned to provide rescue at a low cost to themselves. However, there are problems with the concept of the Duty of Rescue on an individual level, particularly around the duty’s force and scope, which will be discussed now in more detail.

PROBLEMS WITH A DUTY OF RESCUE: FORCE AND SCOPE
While the Duty of Rescue may seem straightforward in its application to vaccination, this concept does encounter some problems more generally. The first challenge is the duty’s scope: how broad is the range of cases that the duty can be applied to? Even if the duty is only limited to low-cost rescues, there may be countless opportunities in daily life to enact those rescues. While there might be only a small number of children that require rescue from a pond, the number of people in need more generally is much larger. If the Duty of Rescue is a generalised duty, there is no way to limit the amount of ‘small rescues’ one is obligated to perform, at this point the duty becomes quite over-demanding as it is clearly not possible to help everyone in need.

The second problem with the Duty of Rescue is concerned with its force. How easily is the duty outweighed by the potential cost to the agent? In the analogy of the child drowning in a pond; the application of the duty is fairly simple. The cost to the agent was muddy shoes and being slightly late to work, which seems a small price to pay when a child’s life is at stake, suggesting that there is a moral obligation to rescue.

However, the Duty of Rescue does not specify limits on minimal costs to the agent. Like the issue with the duty’s scope, this can make it difficult to know what kinds of cases it should be applied to. Consider the following case: An individual can rescue a child dying of a rare blood disorder by donating a pint of his own blood once a month, the rarity of the condition means this individual is likely to be the only chance of a match. If the child does not receive the blood she will die. The individual is perfectly healthy and not likely to suffer any ill effects of donation. The cost to the rescuer is much greater than in the pond analogy, but without any kind of guidance as to what constitutes a low burden, some may argue that the duty to rescue still exists in this case. Generally, the burden on the rescuer should be substantially less than the harm that would befall the victim if the rescue was not carried out, but the Duty of Rescue offers no more guidance than that.13

THE IDENTIFIABLE VICTIM AND RELEVANCE OF PROXIMITY
One way to address the problem of scope in the Duty of Rescue may be to introduce the need for an identifiable victim as part of the criteria. This way, the scope of the Duty of Rescue is limited to rescues of identifiable individuals.

Identifiability enables us to explain why we might intuitively feel that the obligation to save the drowning child exists, but that we do not have the same duty obligations to provide aid to those in developing countries etc. There is a distinction between ‘identifiable’ victims as opposed to ‘merely statistical’ ones. However, even if we limited rescue obligations to apply only to situations where an identifiable victim is present, the issue of force is still problematic for the Duty of Rescue. An identifiable individual allows us to establish that a moral obligation to rescue may still exist even when the rescue is at great cost to the rescuer. Identifiability can explain why we feel the rescuer is morally obligated to save the child from drowning in the pond; but is also obligated to give blood to the dying child.

The rescue intervention of an identifiable person takes on added value, this child can be saved, she is a person we can directly identify with, rather than a statistic. Identifiability of the victim may place even greater burdens on the shoulders of the individual rescuer. How far is one morally obligated to go to save the life of another? The Duty of Rescue still has the potential to be overly demanding and impractical when trying to apply it to rescue scenarios.

Another way to possibly address the problem with the Duty of Rescue’s scope would be through the relevance of proximity as suggested by Miller. Physical closeness will make the victim uniquely vulnerable to the rescuer’s decision whether to carry out the rescue. In the pond analogy, the individual is alone when the child is drowning, there is no one else who would be able to save the child. It is down to this individual agent to enact the rescue. If she does not, the child will die. The rescuer in this case is the only one who can save the child from harm. This unique vulnerability limits the scope of rescue cases, it creates a distinction which can explain why the duty to save the drowning child exists, but why other more generalised duties such as providing aid to charities might not. However, while this might provide some guidance on the scope of cases that the Duty of Rescue can be applied to, it still does not establish a limit on the force of risks/burdens that the rescuer is morally obligated to shoulder to enact rescue cases.
DUTY OF RESCUE CANNOT ESTABLISH A MORAL OBLIGATION TO VACCINATE

Introducing the concept of an identifiable victim poses difficulties when applying the Duty of Rescue to a moral obligation to vaccinate. First, a moral obligation to rescue by being vaccinated against influenza does not have the element of rescue of an identifiable individual as seen in the pond analogy. While it might be possible to say you rescued your grandparents or other vulnerable individuals by being vaccinated, these are only potential rescues of groups of people rather than a direct rescue of an identifiable individual. While vaccines do produce a high probability of avoiding harm from disease, they are a preventative measure, which would not be well supported by our current understanding of the Duty of Rescue. Vaccination does not enact a rescue in the same way that jumping into a pond to save a child does.

Vaccination as a Duty of Rescue would not be supported by the introduction of the proximity concept either. For the proximity of the victim to be relevant, the victim must be uniquely vulnerable to the decision of the rescuer. In other words, only this individual can enact the rescue because of how close she is to the victim. With vaccination this is not the case, any number of vaccinated individuals can be said to have rescued a victim by not passing on the virus, this does not rely on a single individual and their decision to rescue.

If this is the case, the Duty of Rescue does not appear to establish a prima facie moral obligation on the individual to be vaccinated against influenza, as this does not rescue an identifiable victim in immediate danger.

The Duty of Rescue encounters obstacles with its force and scope, making it potentially overdemanding for the individual and difficult to know what kind of rescues it should apply to. From this understanding, it is not possible to establish a strong moral obligation to vaccinate as a Duty of Rescue. However, the possibility of reframing the duty to focus on its application on an institutional level rather than individual moral agents can address the difficulties around force and scope, as well as demonstrate that preventative measures such as vaccination can also be rescue measures that institutions have a collective duty to perform.

RECONSTRUCTING A DUTY OF RESCUE: THE INSTITUTIONAL VIEW

The Duty of Rescue as it applies to institutions shifts the focus away from the individual to a collective approach of rescue. Rulli and Millum define institutions as ‘collectively shared social schemes responsible for the distribution of benefits and burdens across members in the collective’. In the case of vaccinations, this would be primarily concerned with government institutions. While this still does not define a limit on what duties institutions have, it is often the lack of adequate geriatric care and monitoring which land these patients in these emergency situations in the first place. The focus then should be to look at ways in which routine and supportive care can be improved. Looking at rescue from this perspective emphasises the notion that rescues are determined by actions/omissions of societies which are taken prior to the rescue occurring. In other words, this view makes us ask questions such as ‘what actions can be taken/not taken to prevent this from happening in the first place?’

Seeing the Duty of Rescue in this way creates a shift from random and unpredictable rescue to a collective preventative measure. While there will always be some cases that slip through the net requiring large scale rescues, looking at the bigger picture of rescue can reduce the frequency of such rescues occurring. Reframing of the Duty of Rescue is particularly important in the context of vaccination. The traditional view does not leave room for debates on preventative measures, with the focus primarily on our obligation to perform direct rescues of those in imminent danger. However, immediate peril does not necessarily arise at the point where death/danger becomes imminent, but at the last point in which action can be taken to prevent death or serious harm. This would mean that vaccination as a preventative measure could also be considered a rescue measure. Vaccination programmes can be considered as a measure of rescue under the Duty of Rescue. In identifiable high-risk groups for influenza, such as those with existing respiratory conditions or the elderly, the last point in time in which measures to protect such individuals occurs before they have become infected. At this point, the individuals can be rescued by being vaccinated and by implementation of large-scale vaccination across the population. The institutional view has the Duty of Rescue also addresses the concerns encountered by the traditional view around force and scope. First, institutional obligations are not general, they are held to specific populations, this limits the scope of rescue to those whom the institution is directly responsible for. In the context of vaccination, this would mean that providers are only obligated to provide to patients within their own areas of responsibility, such as a particular catchment area. This greatly limits the scope of duty so that no single provider is responsible for an unlimited number of rescues which could be enacted.

The institutional view is also helpful in guiding the limits of force in rescue duties. In an Institutional Duty of Rescue, burdens can be spread out among a collective, meaning that individuals do not incur high-cost rescues. National vaccination programmes like those for seasonal influenza are a prime example of this. Responsibility for providing vaccination is spread among a number of groups who need to work collectively to provide that rescue. From public health officials, pharmaceutical providers, to the healthcare workers that directly administer the vaccines. While this still does not define a limit on what is considered a low-cost rescue, it does allow for burdens to be shared so that individuals or groups only need to enact smaller rescues as part of a collective effort.

To implement an Institutional Duty of Rescue, high-risk groups such as the elderly, those with comorbidities and pregnant women should be prioritised for vaccination, as these are the groups for whom preventative rescue is most significant. However, there is growing evidence that the influenza vaccine is markedly less effective in the elderly. Cellular interactions affected by ageing have been shown to reduce the effectiveness of seasonal influenza vaccines in older adults. This may suggest that if vaccinating the most vulnerable first is relatively ineffective at reducing influenza related hospitalisation and death, perhaps other groups should be prioritised.
One suggestion is the prioritisation of healthcare practitioners (HCPs), with the aim of reducing transmission around those who are most at risk. While studies have shown there may be some reduction in infections where HCPs are vaccinated, the evidence is lacking a sound base for prioritisation over high-risk groups.

A more promising solution may be focussing on vaccination of children. Ecological data from Japan and the USA demonstrates that vaccinating children against influenza can significantly reduce mortality rates in older adults. While this indirect protection strategy may be ethically concerning for some, vaccinated children do actively benefit. Children under the age of 5 are particularly vulnerable to influenza-related complications, and the vaccine itself poses minimal risk of adverse events.

Overall, it may be beneficial for institutions to provide vaccines for children as well as high-risk groups. The National Health Service has rolled out school-based vaccination programmes aiming to vaccinate all children from 2 to 11 years, as studies have shown that as well as protecting children, this is more effective than vaccinating the vulnerable alone. A deeper analysis on how institutions should prioritise and allocate vaccination goes beyond the scope of this paper.

CONCLUSION
The Duty of Rescue encounters several issues particularly around force and scope, making it difficult to know which cases it should apply to, and creating high-cost burdens for the individual. In relation to vaccination, there is not an easy way to demonstrate a direct rescue of an identifiable individual, as vaccination is a preventative measure which does not appear to be well supported by the Duty of Rescue from its traditional perspective. The concept of an Institutional Duty of Rescue as proposed by Rulli and Millum offers a solution to these obstacles, limiting the duty's force and scope by placing the duty to rescue on institutions rather than individuals. This creates a wider context when looking at rescue situations, allowing room for discussion on organised, preventative rescue. From this, it can be argued that an Institutional Duty of Rescue would be well placed to support vaccination programmes and a moral obligation to vaccinate against influenza.

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