

Mandatory Flu Vaccines for

■ **Asha Behdinin and Crystal Chan**

Asha Behdinin is a second year Arts & Science student and Crystal Chan is a first year Life Sciences student. Both share an interest in health-related issues and are members of the McMaster Health Forum Student Subcommittee.

INTRODUCTION

A recent debate on a new policy regarding the influenza (or flu) vaccination has garnered the attention of health care providers (HCPs), policymakers and the public alike.¹ The policy, introduced in August 2012, mandated that all front-line HCPs in B.C. be vaccinated against the flu, and those who refuse must wear a mask in the vicinity of patients. An outcry from the health care community caused the full implementation of the policy to be postponed.² However, this issue raises several key questions regarding the role of ethics and evidence in public health policy.

ISSUES FOR POLICYMAKERS

In light of recent policies mandating influenza vaccination, it is essential to consider both the evidence available to inform the policy and the public's response to such legislation. Current research evidence indicates a lower-than-desired success rate for the vaccination,³ despite HCPs promoting the vaccine as the only effective preventative measure against influenza, productivity loss and death.⁴ If policies mandating influenza vaccination for HCPs are passed, this coercive mechanism may successfully increase vaccination rates. However, policymakers should consider how the use of coercion would impact the public's perception towards public health officials in the future.

EVIDENCE

Strong opposition to the new policy mandating vaccination suggests the need for a review of the evidence about the flu and flu vaccines. In comparison to other

conditions with mandatory vaccination policies (such as measles, mumps and rubella), the flu is often regarded as less of a threat. Hesitation to receive the vaccine has also been fuelled by evidence regarding its effectiveness. According to the Centers for Disease Control and Prevention (CDC), an effectiveness of 52% was reported for the vaccine in 2011–2012,⁵ which decreased to 27% (in older adults, age 65 and above) in 2012–2013.⁶ The risk of older adults contracting H3N2 (one of the three main circulating flu viruses) has also fallen nine percent from the previous year, which further reduces the perceived need to get vaccinated.⁶ Furthermore, the recent suspension of Novartis vaccines, Agriflu and Fluvad,⁷ has led to increased uncertainty and concern regarding the availability, benefits and harms of influenza vaccines. Nonetheless, the CDC claims that vaccination is currently the best method to prevent the seasonal flu, and suggests that individuals who are more susceptible, such as HCPs, children and the elderly, would benefit from vaccination.⁵ However, if mandated, should the vaccination policy—which currently only applies to healthcare settings—be extended to day-care centres, nursing homes and other venues alike?

DUTY TO CARE

The role of HCPs must also be evaluated in order to understand issues of adherence. Despite expectations for HCPs to receive their flu shot owing to their risk of flu exposure in the health care setting, only 60% of U.S. doctors and nurses were vaccinated in the 2010–2011 flu season, and the figures are less than 50% for other HCPs.⁷ The lack of adherence from HCPs may lead to difficulty in gaining support from the public for this policy. However, in accordance with the vows made by HCPs, their duty to care includes the promise to do no harm.⁸ By allowing HCPs to refuse the influenza vaccine, HCPs may unknowingly harm patients by transmitting the flu to them. The question then is whether adding the annual influenza vaccine to the list of mandatory vaccines is the best way to approach this issue.



Health Care Providers: A STEP TOO FAR?

ETHICS

A key ethical issue pertaining to this policy is autonomy. While HCPs have the *prima facie* duties of beneficence, non-maleficence, justice and fidelity to patients,⁹ their autonomy must also be safeguarded in new policies and legislation. Yet to what extent does their autonomy outweigh their duty to care and their duty of beneficence towards patients and coworkers? During pandemics, it may be ethical to infringe on citizens' autonomy when sufficient evidence is provided in support of the policy – such as restriction of freedom of movement during mandated patient isolation and quarantine.¹⁰ However, in order for a mandatory vaccination policy to be implemented, it must be supported by appropriate evidence to justify violation of HCP autonomy.

The duty of beneficence and non-maleficence is a defining aspect of HCPs' roles. Therefore, patients can reasonably expect HCPs to take appropriate precautions to ensure patient safety.⁹ One such measure would be to reduce the risk of flu transmission through mandatory worker vaccination. However, the B.C. Nurses Union has actively opposed this policy. Deb McPherson, union president, stated: "Given the clearly conflicting evidence about the effectiveness of the [flu] shot, we were very much opposed to policies aimed at forcing workers to get it." The Health Sciences Association, another union against this movement, also feels the policy is "coercive" and a "violation of people's privacy."¹¹ Based on these claims, and the inconclusive evidence on the effectiveness of the vaccine, it can be argued that violation of HCP autonomy is not morally justified from

the beneficence/non-maleficence standpoint.

Nonetheless, others argue that this policy is morally permissible. Hospitals and public health officials strongly advocate for HCPs to receive the flu shot as part of a safety and prevention plan for patients.¹² There have been objections concerning whether resources put towards this initiative could be more efficiently allocated. However, such objections based on resource allocation and the opportunity cost of producing and distributing the vaccinations do not provide sufficient basis to reject mandatory flu vaccines. Backer,¹³ for instance, claims that the flu vaccine is the most cost-effective of all preventative vaccinations administered to adults. The production costs incurred by this policy, then, are minimal, especially when compared to other mandatory vaccination policies currently in place. Therefore, based on evidence on the efficacy of similar policies (such as the MMR vaccine), many individuals support the policy of mandatory HCP influenza vaccination.

CONCLUSION

It is important to consider the evidence base and the ethical perspectives regarding mandatory vaccination policies. Currently, the lack of evidence supporting the efficacy of flu vaccinations seems to constrain adherence rates among HCPs and the public. However, mandating that HCPs receive the influenza vaccination in order to benefit the larger patient population may in turn disregard their individual autonomy and rights. Thus, a suitable middle ground between the opposing ethical and efficacy arguments must be met.

1. B.C. backs off on flu-shot policy for nurses. CBC News [Internet]. 2012 November 30 [cited 2013 Feb 10]. Available from: www.cbc.ca/news/canada/british-columbia/story/2012/11/30/bc-flu-shots-nurses.html
2. Theodore T. BC flu shot requirement for health workers suspended. Huffington Post Canada [Internet]. 2012 December 04 [cited 2013 Feb 10]. Available from: [huffingtonpost.ca/2012/12/04/bc-mandatory-flu-shot-requirement-suspended_n_2238054.html](http://huffpost-britishcolumbia.com/huffingtonpost.ca/2012/12/04/bc-mandatory-flu-shot-requirement-suspended_n_2238054.html)
3. Wilde JA, McMillan JA, Serwint J, Butta J, O'Riordan MA, Steinhoff MC. Effectiveness of influenza vaccine in health care professionals: a randomized trial. JAMA 1999;281(10):908-913.
4. Centers for Disease Control and Prevention. Influenza Vaccination Coverage among Health-Care Personnel – United States, 2010–2011 Influenza Season. Morbidity and Mortality Weekly Report (MMWR) 2011;60(32):1073-1077
5. Centers for Disease Control and Prevention. 2011–2012 Influenza Season [Internet]. 2012 Dec 28 [cited 2013 Feb 10]. Available from: www.cdc.gov/flu/pastseasons/1112season.htm
6. Branswell H. This year's flu shot offered little protection to 65s and older: new data reveal. The Vancouver Sun [Internet]. 2012 Dec 04 [cited 2013 Feb 10]. Available from: www2.macleans.ca/2013/02/21/this-years-flu-shot-offered-little-protection-to-65s-and-older-new-data-reveal/
7. Novartis Suspends Distribution of Seasonal Flu Vaccines Agridu and Fluid in Canada as a Precaution. Health Canada [Internet]. 2012 Oct 26 [cited 2013 Feb 10]. Available from: www.hc-sc.gc.ca/ahc-asc/media/advisories-avis/_2012/2012_162-eng.php
8. U.S. Department of Health & Human Services. National Action Plan to Prevent Healthcare-Associated Infections: Roadmap to Elimination [Internet]. No date [cited 2013 Feb 10]. Available from: www.hhs.gov/ash/initiatives/hai/hcplu.html
9. Centers for Disease Control and Prevention. Prevention Strategies for Seasonal Influenza in Healthcare Settings [Internet]. 2013 Jan 9 [cited 2013 Feb 10]. Available from: <http://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>
10. Tilbur JC, Mueller PS, Ottenberg AL, Polan GA, Koenig BA. Facing the challenges of influenza in healthcare settings: the ethical rationale for mandatory seasonal influenza vaccination and its implications for future pandemics. Vaccine 2008;26(4):D27-D30.
11. Selgelid MJ. Pandethics. Public Health 2009;123(3):255-259.
12. Theodore T. B.C. government suspends mandatory flu shots for health workers for one year. The Vancouver Sun [Internet]. 2012 December 04 [cited 2013 Feb 10]. Available from: www.vancouver.sun.com/health/government+suspends+mandatory+shots+health+workers+year/7650399/story.html
13. Backer H. Counterpoint: in favour of mandatory influenza vaccine for all health care workers. Clin Infect Dis 2006;42(8):1144-1147.