

## What to Do to Beat the Flu? Improving Influenza Vaccination Rates among Healthcare Workers

**It is influenza season again**, and many healthcare facilities are struggling to improve vaccination rates among their staff. Influenza vaccination rates for healthcare workers remain low in many healthcare facilities – despite the best efforts of the facilities, as well as an increased risk of infection among healthcare workers compared to the general population and the potential to transmit influenza to patients that could lead to serious consequences.

Organizations often aim to improve vaccination rates by focusing their efforts on educating staff about influenza, the vaccine and its benefits. While this effort likely has some positive influence, previous studies have shown that there is little difference in the level of related knowledge between vaccinated and unvaccinated staff, except for the belief that vaccination can result in influenza. Other research has found an inconsistent relationship between knowledge, attitudes and behaviour. Given these findings, further education may not improve coverage. This article reports on a research study that uses a more current model of health behaviour to identify potential challenges and opportunities for improving vaccination rates among staff. (Manuel et al. 2002) A self-administered questionnaire and focus groups were used to examine the health behaviour and attitudes associated with influenza vaccination in healthcare workers.

Models of health behaviour were developed in the 1950s by social psychologists in an effort to explain the failure of individuals to participate in programs to prevent disease. Original theories proposed that the desire to avoid illness (values) combined with the belief that a specific health action would prevent illness (expectancy) would result in participation in a health program. More current health behaviour models stress the influence of social norms such as a person's belief that important individuals approve or disapprove of performing a behaviour (normative beliefs) and motivation to comply with the behaviour of those in a person's social influence.

The study reported on here, like previous studies, found that the knowledge of vaccine side effects was the same for both vaccinated and unvaccinated staff members. Few people associated the vaccine with serious side effects, although 36% of all staff believed that vaccination is moderately to extremely likely to cause the flu or flu-like illness. Furthermore, there were no differences between vaccinated and unvaccinated staff regarding the value of vaccination, the desire to avoid the flu or the desire to not transmit it to others – including patients under their care. For example, 90% of respondents felt that it was

moderately to extremely bad to give the flu to patients, friends or family members. There were, however, large differences between vaccinated and unvaccinated staff members regarding attitudes and “expectations” of the vaccine. Vaccinated staff were more likely to believe that the vaccine was safe, convenient and valuable. In addition, respondents who were vaccinated were more likely to believe that the vaccine was effective in preventing a wide range of potential adverse outcomes, such as becoming ill or giving the flu to patients, friends and family members.

In the focus groups, there was agreement that individual past experiences with influenza, good and bad, were often the most important factor in a decision regarding vaccination. These experiences included their own as well as those of others at home or at work relative to having had an infection or vaccination. An additional influence was the relatively unique work setting where healthcare workers often see patients who become infected with influenza, despite having been vaccinated. It may be that the high vaccination rate in these patients presenting with influenza contributes to the perception of poor vaccine effectiveness.

Many respondents believed that other measures were more important than vaccination for preventing influenza. Seventy-two percent of individuals believed that hand washing was more important than vaccination, and 56% believed that a nutritious diet and regular exercise were more important than vaccination. Never-vaccinated respondents were twice as likely to believe that these preventive measures were more effective than vaccination.

### **Are There Opportunities to Improve Influenza Vaccination Rates?**

Improving influenza vaccination rates among healthcare workers may be challenging since unvaccinated respondents followed the advice of others less often than did vaccinated respondents, especially if the advice came from upper management, the public health department or their nurse manager. Nearly all staff knew that the public health department and management recommended vaccination; however, only 29% of the unvaccinated said that they are likely to follow the advice of the public health department, and only 15% stated that they are likely to follow the advice of management and nurse managers. One opportunity to improve vaccination rates may be the influence of physicians. Only 27% of healthcare workers who were not vaccinated thought that their physician recommended vaccination for them. Although only 43% of those unvaccinated

said that they generally follow the advice of their physician, this was still the most influential source of information identified in the study.

Another option for increasing vaccination rates is to closely address the concerns of the unvaccinated staff. Study participants agreed that protecting patients from influenza was important, but there was the perception that the focus of immunization efforts was to protect patients – at the staff’s potential expense, harm and burden of responsibility. Furthermore, staff expressed frustration at the lack of support from management when they had vaccination side effects and resented inconsistent policies that focused on staff vaccination as opposed to other opportunities for prevention. Participants expressed a lack of trust that management and public health departments were genuinely concerned about the staff’s well-being in the absence of an emphasis on “wellness” and given the preoccupation with influenza vaccination.

Together, the findings from the staff survey and focus groups suggest that improving vaccination is more than simply educat-

ing staff about influenza and the vaccine. What seems like paradoxical behaviour of a low likelihood of being vaccinated is understandable given a wider context of expectations and social context. Healthcare facilities may improve the vaccination rate among staff by focusing their efforts on avenues of influence other than management – namely, physicians. As well, influenza vaccination programs should be positioned as a component of a workplace wellness program that is directed towards the needs of staff.

**References**

Manuel, D.G., B. Henry, J. Hockin and M. Naus. 2002. “Health Behaviour Associated with Influenza Vaccination among Healthcare Workers in Long-Term-Care Facilities.” *Infection Control and Hospital Epidemiology*: 23.

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