Pharmacist-administered influenza vaccine in a community pharmacy: A patient experience survey

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Influenza is a viral respiratory disease that is more prevalent in the late fall and early winter months in Canada.[1] The global rate of influenza is estimated to be 5% to 10% in adults and 20% to 30% in children. Illnesses sometime result in hospitalization and deaths, particularly in the young (<2 years), the elderly (>65 years), and people with underlying high-risk medical conditions.[2] The true burden of influenza is difficult to measure since not every case is tested, but it is thought that up to 20,000 hospitalizations and 4000 deaths are attributed to influenza in Canada each year.[1]

The administration of the influenza vaccination remains the most effective method to prevent the spread of influenza.[2] It is known to be crucial in protecting the elderly and those considered at high risk; however, in healthy, working adults, flu vaccination has been shown to have significant health-related as well as economic benefits.[3] The Canadian Immunization Guide encourages annual influenza vaccination for all adults, especially for adults older than 65 years, those who are at high risk and those in close contact with children younger than 5 years.[4] As one of the most accessible health care providers, pharmacists are in an ideal position to provide the flu vaccination to the community.[5] In 2012, Ontario pharmacists were given the authority to administer flu vaccines to the public. The uptake has been positive, with 247,000 flu vaccines delivered in Ontario in the first year[6] and more than 765,000 flu vaccines administered by community pharmacists during the 2013-2014 flu season.[7] By providing more accessible flu vaccine administration, the goal is to increase the immunization uptake of the general population. Data from a study in the United States suggest that higher immunization rates are present in the states that allow pharmacists to administer vaccines.[8]

As pharmacists continue to expand their scope of practice, it is important to evaluate the overall patient satisfaction with the new pharmacy services. The purpose of this survey was to assess patients' experiences in receiving their influenza vaccination in a community pharmacy setting.

Method

During the 2013-2014 influenza campaign, more than 600 flu vaccines were administered at a community pharmacy in Hamilton, Ontario. A retrospective patient survey was conducted via telephone from April to July 2014. To ensure consistency, a neutral individual who had no involvement with the administration of the flu vaccine conducted all telephone interviews. There was at least one attempt to contact all persons who received their flu vaccine at this location. Verbal consent was received from each participant and documented.

The patient experience survey was approximately 5 minutes in duration and divided into 4 sections. The first section included demographic information, specifically age and sex. The next section included questions regarding the participant's history of receiving the flu vaccine. The third section focused on assessing the patient's experience and satisfaction with receiving the flu vaccine in a community pharmacy setting, using the 5-point Likert scale. This section also

DOI: 10.1177/1715163515569344

TABLE 1 Demographics and flu vaccine history of study participants

Characteristic	*n* (%)
Age of participants, y	
5-18	28 (12)
19-30	15 (6)
31-40	7 (3)
41-50	24 (10)
51-64	85 (35)
65+	81 (34)
Previous year's vaccination location	
Pharmacy	65 (34)
Doctor's office	83 (43)
Other	43 (23)

assessed the participant's willingness to continue to receive the flu vaccine at a pharmacy the next year and whether he or she would consider receiving other vaccines in this setting. The last section evaluated whether participants had any flu-like symptoms (such as sudden onset of symptoms, high fever, body pain and extreme tiredness) this season, whether they missed school or work, and whether they experienced any adverse effects from the vaccine itself.

Results

A total of 240 flu vaccine recipients participated and completed the survey. Response rate for the survey was 38.4% (240 responses out of 624). Of the participants surveyed, 44.2% were male and 55.8% were female. The age demographics of the study participants are listed in Table 1. Almost 70% of the study participants were older than 50 years. As per Ontario pharmacy regulations, children younger than 5 years did not receive the vaccine at the pharmacy.

Approximately one-fifth (n = 43, 18%) of the participants stated that they had not received the flu vaccine in the previous year. Six participants declined to answer the question. Of those participants who had received the vaccine in the previous year, 34% received the vaccine at a pharmacy, 43% at a medical office and 23% from other locations, such as flu clinics or in the workplace (Table 1).

A 5-point Likert scale was used to measure the patient's experience following the pharmacist-administrated vaccine. Almost all participants (n = 233, 97%) found the overall experience of receiving the flu vaccination in a pharmacy to be "somewhat pleasant" or "very pleasant." As shown in Figure 1, the study participants agreed that the experience was convenient (n = 238, 99%) and that the pharmacist was skilled in administering the vaccine (n = 234, 98%). Most participants stated that they would receive their next flu vaccine at a pharmacy (n = 220, 92%). More than two-thirds of study participants would also like to see pharmacists administer other vaccines in the future (n = 165, 69%).

Participants were also asked questions regarding the outcome of vaccination in terms of effectiveness and adverse events after flu vaccination. Most participants (n = 225, 95%) did not experience symptoms of the flu this season. Only 11 people reported symptoms of the flu, with 4 people declining to answer. More important, only 3 of 240 people missed work or school due to symptoms of the flu. Of this subpopulation, they reported missing only 1 day of work due to symptoms. Finally, only 7 participants reported site-related pain from the flu vaccine.

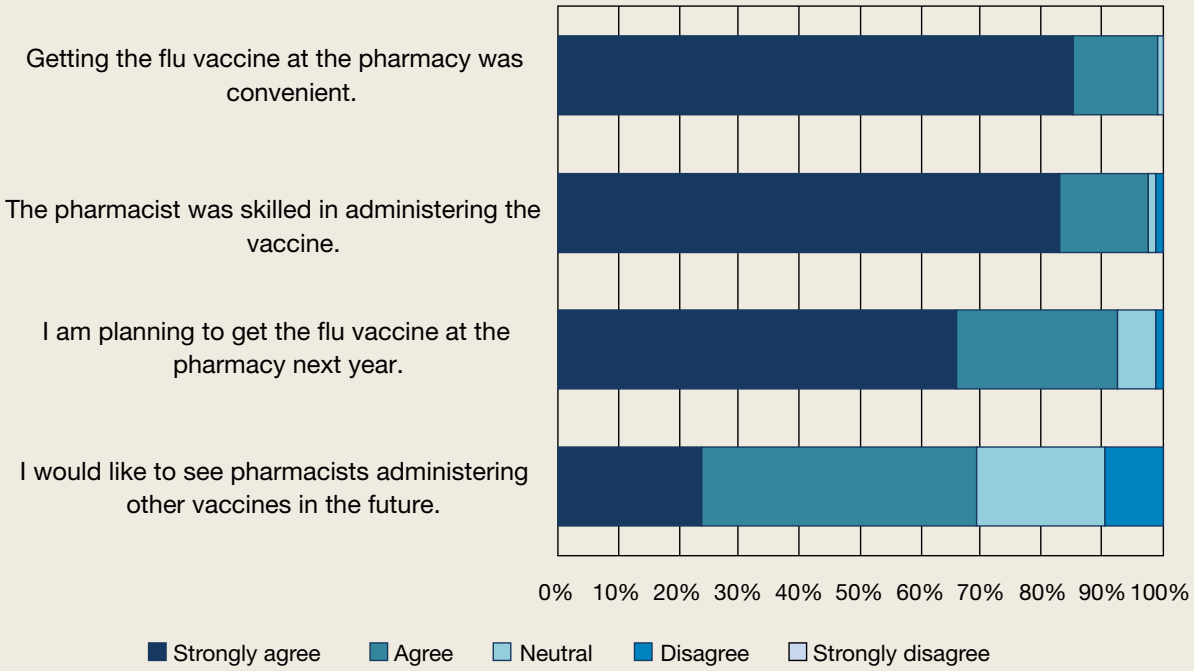
Discussion

The overall patient satisfaction with pharmacist-administered vaccines is positive. Most patients agreed that the experience was pleasant and very convenient, that pharmacists were skilled and that they would consider the same service in the future. The results of this survey encourage pharmacies to continue promoting influenza awareness and vaccination into the next flu season.

The main advantage for pharmacist-administered vaccines is convenience. Many pharmacies are open 7 days a week, support longer hours than many medical clinics and are found within close proximity to almost all residential neighborhoods in Ontario. In addition, the convenience of dropping in rather than setting up an appointment to receive the flu vaccine increases patient uptake of the service. The higher visibility of the service in the community setting may also play a factor in the public uptake of pharmacist-administered vaccination.

Interestingly, the survey found that 18% of the participants did not receive the flu vaccine last year. By providing this service in a more convenient and visible location, more people

FIGURE 1 Opinions of individuals immunized by community pharmacists



may consider receiving their vaccination. In addition, more than one-third of the participants were part of the high-risk age bracket of 65 years and older. Ensuring that these participants receive their flu vaccine is particularly important, as they are more likely to be negatively affected by contracting the flu. The results from our survey are similar to the findings by Van Amburgh et al.,[9] who showed higher immunization rates through pharmacist-administered vaccination programs.

The limitation of this study was that we were only able to assess 40% of our over 600 patients who received the vaccine. This was mostly due to our inability to reach them over the phone. In addition, our study only reflects the opinions of individuals who received their vaccine at the same pharmacy and therefore cannot be generalized to other pharmacies across the province. Finally, we used an unvalidated survey instrument to judge patient satisfaction. Further studies are needed to confirm the true impact of pharmacist-administered vaccines in the public.

Conclusion

The overall positive response from the patient experience survey suggests that participants were very satisfied with the influenza vaccination service being provided by pharmacists. As pharmacists continue to expand their scope of practice, it is important that they contribute to the public's overall health by reducing the circulation of infectious diseases such as influenza. Administration of the influenza vaccine by pharmacists is a crucial way of increasing immunization rates in Ontario, and the public response encourages continuation of this service. ■

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Author Contributions: *S. Poulose initiated the project, designed the methodology, conducted the project, supervised the project and wrote the final draft. E. Cheriyan and R. Cheriyan administered the vaccinations and reviewed the draft. D. Weeratunga compiled the data and wrote the first draft. M. Adham conducted the telephone interview.*

Declaration of Conflicting Interests: *The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.*

Funding: *The authors received no financial support for the research, authorship and/or publication of this article.*

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