Research shows how to boost flu vaccine uptake

Improving awareness of eligibility criteria among patients and health practitioners will increase flu vaccine uptake, writes Clare Leonard

SEASONAL INFLUENZA is an acute viral infection which is responsible for annual epidemics during the winter months. While most people infected with influenza will recover within one week without the need for medical attention, influenza can cause serious illness and death in those considered to be at high risk. Worldwide, an annual influenza epidemic is estimated to result in approximately three to five million cases of severe illness and 250,000 to 500,000 deaths.1

Aside from the traditional at-risk groups of the elderly and those with chronic disease, there is increasing awareness that other groups within the population should be regarded as at higher than average risk of severe disease. As such, the National Immunisation Advisory Committee added new recommendations for 2010/2011 influenza season in Ireland. Currently, the following groups are eligible for the influenza vaccine, with an asterisk marking groups newly added for the most recent flu season:2

- Persons aged 65 years or older
- Residents of nursing homes or long-term care facilities
- Healthcare workers/carers
- Persons with immunosuppression due to disease or treatment
- Persons of any age with chronic illness requiring regular medical follow-up (includes chronic respiratory disease, chronic heart disease, diabetes and chronic renal disease)
- All pregnant or postpartum women*
- Chronic liver disease*
- Chronic neurological disease*
- Morbid obesity (BMI > 40)*
- Children with any condition that can compromise respiratory function, especially those attending special schools/day centres*
- People with close, regular contact with pigs, poultry or water fowl*.

Vaccination is a safe and effective means of preventing illness and reducing complications secondary to influenza. Among healthy adults, vaccination prevents 70-90% of influenza-specific illness and among the elderly, vaccination reduces severe illness and complications by up to 60% and deaths by up to 80%.1

Currently in Ireland, there is no system for estimating the uptake of influenza vaccine in at-risk groups except for persons aged 65 years and older. For the 2008/2009 flu season, vaccine uptake in the over 65 age group was 70.1%. A study in 2005/2006 estimated the number of people aged between 18 and 64 years who were eligible for vaccination and concluded that uptake of the influenza vaccine in this age category was 28%.3 With regard to this study, 60% of non-vaccinated individuals, for whom vaccination was indicated, perceived themselves to be at low risk of influenza. This underpins the importance of increasing awareness of eligibility criteria.

Interestingly, half of influenza-vaccinated respondents reported that their family doctor had recommended it. This finding has been supported by several international studies which have found that the family doctor is the most important source of encouragement for people to be vaccinated against influenza.4 6

In consideration of the above information, this research project was designed around using a variety of means to increase awareness of the eligibility criteria for influenza vaccination and determining whether this increased vaccine uptake within our practice population. Our practice has a patient population of approximately 10,000 patients with 5% of patients being age 70 years or older. Prior to the 2010/2011 influenza season, administration of the vaccine in the practice would have been solely opportunistic. The practice uses Socrates software.

Aims and objectives

Our project aims were as follows:

- To increase awareness of the indications for influenza vaccination, both within the patient population and among healthcare practitioners in the practice
- To form a register of those patients who qualified for the flu vaccine
- To contact eligible patients who were delayed in attending for vaccination
- To ascertain patient knowledge of indications for vaccination, attitudes to vaccination and any potential barriers that may exist by means of a self-answered questionnaire.

Our project objectives were as follows:

- To assess if the overall uptake of the seasonal influenza vaccine had increased in 2010/2011 compared to the same period in 2009/2010
- To quantify what proportion of those patients deemed to be eligible for the vaccine had received it
- To ascertain what proportion of patients directly contacted by the practice subsequently attended for vaccination.

Methodology

A list was formed of all patients who had received the influenza vaccine during the 2009/2010 flu season.

Increasing awareness

At the beginning of the influenza season, vaccination was discussed at a practice meeting attended by all healthcare practitioners in the surgery. An overview was given of
changes in the practice approach for the 2010/2011 flu season and current eligibility criteria, including new target groups as per the HSE, were discussed. A large poster was placed in the practice waiting room. This listed groups eligible for the flu vaccine, stated that it was available in the practice and advised regarding cost (free for eligible GMS patients; cost of vaccine and administration for eligible private patients). In addition, laminated A4-size posters were placed in high visibility areas in all rooms used by healthcare practitioners.

During the peak vaccination period, flu clinics were established in the practice. On approximately two afternoons per week, a number of the practice nurses’ appointments were designated for consecutive flu vaccinations. The formation of a register, had a positive impact on influenza administration. With a practice population of approximately 2,000 patients, vaccination coverage for the total population was 3.8% in 2009/2010 and increased to 8.62% in 2010/2011. The total number of patients on the register, and therefore eligible for the flu vaccine, was 1,265 and of these patients, 808 received the vaccine, with a resulting vaccination coverage within target groups of 63.87%. Of the 352 patients who received a reminder in the form of a letter, 117 went on to have the flu vaccine. Therefore, the response rate to a personal invitation was 33.24%.

With regard to the self-answered questionnaires, 53 were completed with each questionnaire consisting of six questions. When asked about there being any reason for their delayed attendance, 13.2% of patients had been unaware that the vaccine was available and 26.4% of patients had been unaware that they were eligible. Roughly a third (30.2%) of patients had delayed in attending due to a lack of free time, while 5.7% of patients were unsure why they qualified for vaccination. A total of 35.8% of respondents stated that by receiving the vaccine they would avoid getting flu, whereas only 5.7% stated that receiving the vaccine would decrease the risk of contracting flu. Another 5.7% stated that the vaccine would decrease complications if flu was contracted.

Discussion

In the two consecutive influenza seasons surveyed in this study, there was more than a two-fold increase in vaccine administration. With regard to the 1,265 patients who featured on the register, 808 received the vaccine, resulting in a vaccine uptake rate of 63.87% among target groups. This figure is roughly comparable to national uptake rates according to the HSE’s figures (61.7% in 2007/2008 and 70.1% in 2008/2009). However, it must be noted that while national uptake rates refer only to those aged 65 and older, our figure for vaccine uptake refers to all target groups.

In our questionnaire, just over a quarter (26.4%) of those surveyed had delayed in getting the vaccine as they had been unaware that they were eligible. As mentioned previously, this finding is supported by previous studies which have identified poor perception of risk amongst those for whom vaccination is actually indicated. We can therefore conclude that increasing awareness of eligibility criteria among patients has the potential to improve vaccine uptake. As many as 30.2% of patients surveyed cited lack of free time as a reason for delay in attending. The organisation of flu clinics may partly address this issue. In this situation, patients could expect less waiting time and a more time-efficient service.

This study has demonstrated that increasing awareness of eligibility criteria for vaccination both within the patient population and among healthcare practitioners, along with the formation of a register, had a positive impact on influenza vaccine uptake within our practice.

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References on request