Attitudes of Hospital Healthcare Workers towards Influenza Vaccination in a Tertiary Hospital Setting

Abstract:

The rate of uptake of seasonal influenza vaccination worldwide by healthcare workers (HCWs) has been suboptimal. National data from Ireland indicates that uptake of influenza vaccination by HCWs in the National Health Service (NHS) was 35.5% prior to 2010. In the 2010/2011 influenza season, a significant number of staff chose to have their vaccinations after the usual campaign period. The Occupational Health Department (ORD) undertook a questionnaire survey to determine the reasons(s) for their late presentation. This was not anonymised, with a 21.7% participation rate (119 replies out of 548). We found 86(72.3%) HCWs believed influenza to be a serious illness, 84(70.6%) wanted to protect their family members and friends, and 44(36.7%) were unconvinced on the effectiveness of the vaccine. Nevertheless, 113(91.3%) HCWs were influenced by the recent media attention on the H1N1 influenza pandemic. We conclude external factors such as the arrival of the H1N1 pandemic continue to play an important role in influencing HCWs attitudes towards receiving the vaccine.

Introduction

The ORD in Beaumont Hospital, comprising two doctors and three nurses, conducts annual influenza vaccination programmes for all staff during the peak influenza months of October and November. This programme is facilitated by the delivery of vaccines in the department (during week days and certain evenings to accommodate the evening shift), including the use of mobile carts to areas where staff normally congregate. Vaccine delivery is according to procedures outlined in the departments policy document prepared by the consultant, and includes obtaining consent and information on health benefits and side effects. Numbers of uptake each season are recorded and compared to previous years. To ensure successful uptake, during time of attendance, time constraints and missing the mobile cart; the second group who appeared to be 'unconvinced' on the effectiveness of the vaccine, nor its safety profile. As such we believe it was important to deliver the vaccine; seasonal influenza vaccine is provided free for all HCWs by the HSE. The first part of the survey included the participants demographics i.e. name, age occupation and gender. Secondly, the participants were asked to choose from the suggested reasons for not receiving the vaccination during the October-November period. Next, HCWs were to indicate their reasons for finally getting vaccinated, and in addition their opinion on the most effective way to motivate staff members finally to decide to get vaccinated. The results were collated after four weeks into Excel and analysed manually.

Methods

In April 2011, the names and demographics of staff who presented late were identified from our records. A questionnaire was attached to each pay slip, along with a pre-addressed return envelope and covering letter. An incentive (draw for a shopping voucher) to participate was also offered (see Table 2 on how staff rate the effectiveness of this approach). Of note there were no significant financial constraints in the OHD’s ability to deliver the vaccine; seasonal influenza vaccine is provided free for all HCWs by the HSE. The first part of the survey included the participants demographics i.e. name, age occupation and gender. Secondly, the participants were asked to choose from the suggested reasons for not receiving the vaccination during the October–November period. Next, HCWs were to indicate their reasons for finally getting vaccinated, and in addition their opinion on the most effective way to motivate staff members finally to decide to get vaccinated. The results were collated after four weeks into Excel and analysed manually.

Results

From a total of 548 questionnaires, there were 119 replies, a participation rate of 21.7%. The highest responses to the first question i.e. reasons for not getting vaccinated initially, and the second question i.e. reasons for finally availing of the vaccine are shown in Table 1. The results (Table 1) demonstrate that although a significant number of HCWs appeared to have intentions to avail of the vaccine, they did not do so due to either time constraints (in 49.6% of cases) or practical issues like missing the mobile cart when it was brought to their various departments (40.0%). For example, these reasons were HCWs concerns regarding side-effects (23.3%) and perceived side-effects from previous vaccinations (14.3%). Table 1 also indicate the reasons for staff members finally availing of the vaccine. The majority stated that they believe influenza to be a serious illness (72.3%), that they wanted to protect their family members and friends (67.6%), and patients (64.7%). Reports of influenza outbreaks amongst patients were noted during this period, but no increased absenteeism levels amongst HCWs. We undertook a questionnaire survey of all HCWs who presented late to determine their reason(s) for this, and took the opportunity to evaluate our current efforts in promoting the programme.

Discussion

HCWs are at increased risk of seasonal influenza infection compared to the general population. It is estimated that at least 20% of HCWs are infected with influenza annually, and many continue to work despite being ill, increasing the risk to their patients and colleagues. Worldwide, the rates of uptake of influenza vaccine among HCWs are suboptimal; 38% in the USA. The overall uptake by HCWs in Irish hospitals was 24.4% for the 2013–2014 campaign, an increase from 17.4%, in the previous season. In the US, 45.6% of frontline HCWs received the influenza vaccine during the 2012/2013 season. The higher UK figures may be due to a heavier promotional campaign, so called flu fighter campaign which has successfully been embedded into the NHS. In certain states in the U.S., controversial mandatory seasonal influenza vaccination policies have been implemented for HCWs, where uptake figures of 88% and 94% have been recorded.

A previous study highlighted the need of multifaceted education programmes which are likely to achieve sustained and significant improvements over single interventions. These include health promotion strategies such as the use of screen savers, mobile carts, and encouragement from professional peers. Nevertheless, it appears certain external factors which attract media attention may also play a part. Hence, when a significant number of HCWs chose to forgo the annual influenza campaign and instead presented late following a media campaign which focussed attention on the H1N1 pandemic, we took the opportunity to investigate this further. The results show that although a
significant number of HCWs seemed to have intentions to avail of the vaccine, they did not do so due to either time constraints or practical issues like missing the mobile cart. It can be surmised that these HCWs were convinced on the efficacy of the vaccine and its safety profile. As for the reasons for HCWs finally availing of the vaccine, although the majority stated that they believed influenza to be a serious illness and they wanted to protect others from the infection, it can be surmised that these HCWs were ‘convinced’ on the efficacy of the vaccine and its safety profile. As for the reasons for HCWs finally availing of the vaccine, although the majority stated that they believed influenza to be a serious illness and they wanted to protect others from the infection, the media attention on the H1N1 pandemic also influenced their decisions. The responses of the unconvinced group appear to correspond to the same reasons as above.

Thus it may be concluded that the arrival of the H1N1 influenza pandemic had a significant effect on HCWs attitudes towards receiving the vaccine, probably by appealing to their altruism in terms of protecting others. Participants rated the use of the mobile cart as the most effective mode of vaccine delivery, followed by education sessions and the use of posters. Suggestions were given on how the OHD could improve vaccination delivery, including advice regarding times of delivery, and request for more information on side effects. In summary, despite persistent efforts by the OHD to try motivating and educating staff on influenza vaccination, it appears external factors specifically media influence also play a significant role in HCWs attitudes towards getting vaccinated. Perhaps this study highlights the need to explore HCWs attitudes towards mandatory influenza vaccination programmes in the European setting, which have been successfully applied in certain centres in the U.S.

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