Healthcare Worker Perceptions and Practices Regarding Influenza Vaccination

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Introduction

Influenza vaccination has been shown to reduce morbidity and mortality related to influenza. Despite the evidence supporting this, healthcare workers (HCWs) have low rates of vaccine uptake. This has prompted some institutions to institute mandatory vaccination programs. Some studies have investigated reasons why HCWs have such low rates of vaccination and results have suggested overall knowledge about influenza and influenza vaccination are inversely correlated with vaccination status. To better understand HCWs perceptions and practices regarding influenza vaccination in Maricopa County, Maricopa County Department of Public Health (MCDPH) surveyed HCWs currently employed in their profession and working within Maricopa County.

Methods

Survey Design

- From May – June 2011 online and telephone surveys were administered to a representative sample of HCWs in Maricopa County
- Providers (n = 455)
- Nurses (n = 402)
- Technicians (n = 364)
- Participants were ≥18yrs and currently employed in identified positions in Maricopa County
- Survey consisted of 33 questions, some with follow-up or sub-questions, multiple choice or open-ended.

Statistical Analysis

- Likert scale responses were dichotomized and unknown or refused responses were ignored
- Two models were generated via logistic regression and are shown in Figure 1

Results

Survey Results

- Influenza Vaccination Uptake by Demographics and Beliefs Statements

<table>
<thead>
<tr>
<th>Age</th>
<th>N (%)</th>
<th>Yes (n=242)</th>
<th>No (n=542)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;40 years</td>
<td>71%</td>
<td>327 (61%)</td>
<td>166 (30%)</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>≥40 years</td>
<td>29%</td>
<td>172 (32%)</td>
<td>416 (71%)</td>
<td></td>
</tr>
</tbody>
</table>

- Favors: I’d be more likely to get the flu vaccine if others were sick around me.
- Disagrees: I’m concerned that the flu vaccine will make me sick.

- Models for influenza uptake (2010 and usual practice) by Demographics and Beliefs Statements

<table>
<thead>
<tr>
<th>Sex</th>
<th>N (%)</th>
<th>Yes (n=242)</th>
<th>No (n=542)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>59%</td>
<td>203 (59%)</td>
<td>329 (70%)</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Male</td>
<td>41%</td>
<td>139 (41%)</td>
<td>613 (70%)</td>
<td></td>
</tr>
</tbody>
</table>

- In any given year, if you didn’t get an influenza (or flu) vaccination, how likely do you think you are to get the flu?
- Likely: 393 (35%) 325 (<0.01) 35 (0.01)
- Disagree: 744 (65%) 565 (<0.01) 120 (<0.01)

Discussion and Conclusions

Providers and HCWs with more experience were more likely both to report vaccinating regularly and to have reported vaccinating during the influenza season immediately preceding the survey. The strongest two correlations found in both models are agreement with the statement “Getting the flu vaccine protects my family members” and estimation that the average person is “Likely” or “Very likely” to get influenza in a given year. These two beliefs, therefore, could represent potentially modifiable educational targets for improving HCW influenza vaccination uptake.

These data also suggest that increased efforts to reduce cost or increase convenience might be relatively less effective, as the correlations were not as strong.

Acknowledgements

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