



Increasing compliance of Influenza vaccine administration in peri-pregnant women

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Introduction

- Influenza vaccine administration is well known to most individuals; however, pre-conception, pregnant, or post-partum women are amongst the lowest group to receive the vaccine in the workplace. While most women have an understanding of the vaccine few understand the impact receiving the vaccine has on not only themselves but their coworkers and families. Implementing an education system, increased exposure to influenza vaccine information, and an opportunity to receive the vaccine will allow all women to fully understand the impact that the influenza vaccine can make.

Purpose

- According to the Centers of Disease Control's 2011 National Health Interview Survey, only 27.2% of adults among the ages of 18 to 49 years old received the flu vaccination within the past year.
- Women within this category are of child bearing age and may have the potential of becoming pregnant or having a neonate within or near the prime flu season of October through March.
- Awareness and education is needed for pre-conception, pregnant and post-partum women; informing them of the importance of the flu vaccination acting as their primary prevention to the flu for themselves as well as their child.

Supportive Research

- According to the CDC's 2013 Internet Panel Survey, there was a slight increase in flu vaccinations from the 2011 to 2012 flu seasons of 7.3% in pregnant women (CDC, 2014)
- Pregnant women who were given the recommendation to receive a flu vaccination were six in a half times more likely to receive a flu vaccination than those who did not receive the recommendation (CDC, 2014)
- Evidence shows that flu vaccination given anytime during the second and third trimester but at least 15 days before delivery increased cord blood antibody titers and seroprotection rates in neonates (Blanchard, 2013)
- To improve vaccination within the workplace, an incentive program, intense campaign advertising and education among giving the employees the choice of which influenza vaccination they would receive improved administration rates within the workplace (Nowalk, 2010)
- Meharry et al. (2013) researched why women accept or reject the flu vaccination, six themes emerged that influenced the participants decision including the following:
 1. Differing degrees of influence; family, friends, healthcare personnel
 2. Two for one benefit; benefit for mother and neonate
 3. Fear of vaccination and/or influenza
 4. Women who verbalized a 'no need' for the vaccination were more likely to the fear the vaccine
 5. Convenient location to obtain the vaccination increased administration
 6. Concern of H1N1 in 2009 increased awareness for pregnant women to obtain vaccine

Intervention

Guideline Objectives:

- To provide free influenza vaccinations to all employees, in conjunction with evidence-based education and knowledge about the influenza vaccine to all female employees within the insurance company in order to increase the number of women who receive the vaccine prior to the start of influenza season. Female employees will be offered educational session with an obstetrician-gynecologist or Women's Health Nurse Practitioner, educational pamphlets with both risk and benefits explained, and a \$5 gift card incentive.

Target Population:

- Pre-conception, pregnant, or post-partum women
- The population of focus includes working women within child bearing years, both pregnant and non-pregnant, who work within an insurance company and are in need of an influenza vaccine
- Our interventions will occur within the insurance company and be implemented just prior to influenza season beginning (Oct-May).

Interventions and Practices Considered:

- Education- providing education about both the risk and benefits of the influenza vaccine to all women especially those who are pregnant, plan to become pregnant, or who have recently given birth during influenza season will provide clarification about questions related to the influenza vaccine, it's impact on both born and unborn children, and how it will affect the pre-conception, pregnant, or post-partum woman.

Economic

- Women that receive the influenza vaccination are less likely to be absent from work due to their own illness or their offspring's illness. (Mollard, 2014)
- Increasing vaccinations among women of child bearing age will lower their overall health care costs, and decrease lost wages from missing work. (Mollard, 2014)

Cultural

- Some women believe that the flu vaccine is not safe and that it can cause more harm than good. The CDC states that they have administered the influenza vaccination safely for over 50 years. (CDC, 2014)
- There is no contraindication in breastfeeding and the influenza vaccination as some women believe. Breastfeeding actually transfers the anti-influenza antibodies to baby until the age of 6 months. (Hubka, 2011)
- Pregnant women are among the lowest population to get vaccinated each year. Lack of knowledge about the vaccination, safety concerns, and never receiving the vaccination are believed to be some of the top reasons for not getting vaccinated each year. (Mollard, 2014)

Cost and Feasibility

- By increasing awareness and vaccinations through educational sessions during work hours, hospitalizations will decrease leading to decreased medical costs that insurers have to pay. (Mollard, 2014)
- Vaccinations among pregnant women can lead to a savings of \$50 per woman by third parties. (Mollard, 2014)
- Practitioners who educated their patients are more likely to receive the vaccination than women who were not educated about the benefits of the vaccination to themselves and their offspring. (Mollard, 2014)

Goals

- Financial incentives for providers will lower costs. (Mollard, 2014)
- Increase awareness of the benefits of vaccination by email, brochures around work facilities to increase vaccination rates. Offering the \$5 gift card will gain more attention to women that are at risk for the influenza virus. (Mollard, 2014)
- Decrease the amount of hospitalizations through immunizations. Women who contracted influenza were 7.2 times more likely to be hospitalized than non pregnant women (Hubka, 2011)

Intervention:

- An educational session with an OB/GYN MD or Women's Health NP will be offered in the month of August during working hours in which content about the influenza vaccine will be provided in lay person terms. Opportunities for questions will be allowed and educational pamphlets provided. Employees with additional questions will be referred to employee health.
- For women unable to attend the educational session, educational pamphlets will be available at the cafeteria, employee health, and a copy sent via company email.

Evaluation:

- Proper education and knowledge will be provided and female employees will acknowledge understanding upon completion of a brief follow up survey.

The Health Belief Model

The Model:

- Proposed in the 1950's by US public health social psychologists to determine why people did not participate in health promoting behaviors such as immunizations and routine screening tests.

- It is a commonly applied theory in nursing because it focuses on compliance with preventative services and screenings.

- There are **3 parameters the model uses:**

1: Modifying Factors:

- Demographics such as age, race, gender, ethnicity, etc.
- Sociophysiological factors such as peer pressure, social class, etc.
- Structural Variables: Knowledge and previous experiences with their health.
- Cues to action: Media, pharmaceutical marketing, etc.

2: Individual Perceptions:

- Perceived susceptibility-do they believe they are at risk for contracting illness?
- Perceived severity- how badly will they be impacted physically and socially if they contract an illness?
- Perceived threat- Their thought on the degree of the threat of illness.

3: Likelihood of action:

- Perceived benefits- will the intervention be effective in preventing illness?
- Perceived barriers- Cost, convenience, time spent, pain, etc. of the intervention.

PRIMARY GOAL: increase the number of working women of child bearing age, both pregnant and non-pregnant, who receive the influenza vaccine.

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Necessary Data/Tools:

- Pamphlets
- Time for women to come to the presentation
- Administrators of vaccine
- OB/GYN doctor and Women's Health NP to complete education
- Computer access to complete the survey vs. paper surveys
- Influenza vaccines
- Injection needs
- Band-aids
- Alcohol prep
- Gloves