



## Introduction

- Influenza vaccination rates of pregnant women have remained around 50% since 2009
- Non-physician obstetric healthcare provider knowledge and attitudes is a known barrier to vaccination
- Objective: improve knowledge and attitudes in this cohort using a PowerPoint presentation and educational pamphlet

## Methods

- Prospective study; inpatient and outpatient
- Pre-intervention survey assessing knowledge and attitudes of influenza vaccination and pregnancy
- Educational PowerPoint presentation followed by distribution of an educational pamphlet and post-intervention survey

## Results

- Included nurses (n=83), MA/CNA (n=47), receptionists (n=25), and other workers (n=43)
- Groups similar in race/ethnicity, job description, number of years working in that position

	Pre-presentation (n=202)	Post-presentation (n=83)	p
<b>Believes vaccines are an effective way to decrease infection</b>	<b>165 (82.09%)</b>	<b>77 (92.77%)</b>	<b>0.03</b>
<b>Believes vaccines are safe</b>	<b>143 (71.14%)</b>	<b>71 (86.59%)</b>	<b>0.006</b>
<b>Believe vaccines are safe in pregnancy</b>	<b>113 (56.78%)</b>	<b>66 (79.52%)</b>	<b>0.0003</b>
Influenza Vaccination is recommended for pregnant women	177 (87.62%)	78 (95.12%)	0.08
<b>Pregnant women are at increased risk of complications from the flu</b>	<b>144 (71.29%)</b>	<b>71 (85.54%)</b>	<b>0.01</b>
Correctly identified flu symptoms	114 (56.44%)	52 (62.65%)	0.36
<b>Would recommend flu vaccine to pregnant women</b>	<b>146 (73%)</b>	<b>72 (88.89%)</b>	<b>0.004</b>
Would receive flu vaccine if pregnant	158 (78.23%)	68 (82.93%)	0.42

**Common misconceptions about the flu vaccine and pregnant women**

- The flu vaccine does not cause the flu.
- The flu vaccine does not cause birth defects.
- The flu vaccine does not cause bad side effects for the unborn baby.

**What can you do to improve vaccination?**

- Stock the vaccine in the office during influenza season.
- Implement standing orders for all pregnant patients.
- Create chart prompts for the vaccination order in the electronic medical record.
- Continue educational efforts of all employees as well as patients.

**Who should not get the vaccine?**

- Women with severe, anaphylactic allergy to eggs (i.e. cannot breathe).
- Women with a current moderate or severe illness.
- History of Guillan Barre Syndrome (a neurologic disorder) 6 weeks after a prior influenza vaccine.

**What are the side effects of the flu vaccine?**

- Soreness or redness at the site of the vaccine is seen in 15-20 percent of women.
- Non-specific symptoms (fever, chills, malaise) occur in less than one percent of women.
- Allergic reactions and neurologic reactions are very rare.

**How can we prevent the flu?**

- The flu vaccine reduces the risk of influenza.
- Women who receive the vaccine but still get the flu have a less severe illness.
- There is a reduced risk of hospitalization and intensive care unit admissions.
- The vaccine also protects the baby from getting the flu.

## Conclusions

- Improvement in knowledge and attitudes of this group is necessary to improve influenza vaccination rates
- Implementation of a standardized educational tool improves knowledge and attitudes
- Further study is warranted to determine if this improvement will lead to increased vaccination rates