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Barriers and Motivators for Influenza Vaccination Compliance Among Healthcare

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Barriers and Motivators for Influenza Vaccination Compliance Among Healthcare

Workers

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Table of Contents

Abstract.....	1
Introduction.....	2
Literature Review.....	5
Motivators For Influenza Vaccination.....	5
Barriers to Influenza Vaccination.....	7
Promotional Strategies to Increase Influenza Vaccination Rates.....	9
Research Questions.....	13
Methodology.....	14
Results.....	17
Case Study.....	19
Hospital Information.....	19
New Hospital Protocol.....	20
Discussion.....	24
Literature Cited.....	26
Appendix A.....	29
Appendix B.....	30
Appendix C.....	31

Abstract

The influenza vaccine is a topic of much debate and concern throughout the healthcare profession. This vaccination has been shown to drastically reduce the number of nosocomial infections of the flu among hospitalized patients. While many healthcare professionals are aware of the benefits of obtaining the influenza vaccination, many remain noncompliant to actually getting vaccinated. This research will use a form of evidence-based practice known as an integrative review of literature in order to determine the course of nursing action to implement regarding influenza vaccination that will best increase the rates of its compliance among health professionals. A number of research articles regarding barriers to vaccination, reasons for vaccine compliance, and promotional strategies used to increase the vaccination rates will be evaluated in this study. After critiquing each work, an evidence-based plan will be drawn from this critical analysis of the literature.

Introduction

Influenza, more commonly known as the flu, is an acute viral upper respiratory tract infection that is extremely contagious and affects people of all ages (Ignatavicious & Workman, 2010, p.658). The flu impacts approximately 5-20% of the United States population every year; influenza causes a staggering 3,300 to 48,600 deaths per year and 23,600 deaths on average (United States Department of Health and Human Services [USDHH], 2011). People who contract influenza experience “severe headache, muscle aches, fever, chills, fatigue, weakness, and anorexia” (Ignatavicious & Workman, 2010, p.658). However, those who have contracted the illness can infect others one day prior to the onset of these symptoms and up to 5 days after such signs develop (Centers for Disease Control and Prevention [CDC], 2010b).

In order to limit the spread and prevalence of the influenza virus, the flu vaccine has become a mainstay of treatment. The CDC (2011a) confirms this notion by stating “the best way to prevent the flu is by getting vaccinated each year” (p. 1). Two types of flu vaccination delivery are available—a nasal spray and an injection (Ignatavicious & Workman, 2010). The nasal spray contains an attenuated, or “live, weakened virus,” which still has the capability to develop the actual illness (Dugdale, 2010). The injection, which will be the primary focus of this inquiry, does not possess this same ability. The flu vaccine in the intramuscular injection form contains a killed, inactive form of the virus; therefore, “it is not possible to get the flu from this type of vaccine” (Dugdale, 2010). This form is composed of three different strains of influenza, whichever three strains show the greatest possibility of being prevalent during the year’s flu season (Ignatavicious & Workman, 2010). Side effects of the influenza vaccine include

discomfort at the injection site, fever, and aches (CDC, 2011b). The flu vaccine was linked to causing Guillian-Barre syndrome in 1976; since then, the flu vaccine has not been associated with this syndrome (CDC, 2011b).

In the United States, flu season begins in October and ends in April, with its peak occurring during the month of February (*H1N1 and this flu season*, 2010). Getting vaccinated prior to the first of the season is critical in order to prevent oneself from infection the entire year. Therefore, the CDC (2010c) recommends individuals get vaccinated in September, or as soon as the new strains have been chosen for the year and the vaccine is available for public use. The vaccine is recommended annually for individuals over the age of 50, those working in healthcare settings, people who are immunocompromised, and those who live with a large number of other individuals (Ignatavicious & Workman, 2010).

With the high rates of individuals contracting the influenza virus in addition to the preventative methods presented, many healthcare professionals remain unprotected by the flu vaccination. Additionally, “vaccination of healthcare workers against influenza is the single most effective measure for prevention of transmission of influenza within healthcare facilities” (Polgreen, 2008, p.14). In 2005, a National Health Interview Survey conducted by the CDC (2007) found that only 34% of healthcare workers received the flu vaccine for that year (p. 103). Exploring the reasons for such an occurrence is necessary in order to determine the best course of action to increase the vaccination rates among healthcare professionals and, as a result, decrease the number of nosocomial infections of the influenza virus. The flu not only affects the health of patient’s residing in a healthcare

setting, but also limits the availability of healthcare workers to take care of those individuals, leading to staff shortages due to influenza infection (Polgreen, 2008).

Through this inquiry, I explored the reasons healthcare professionals remain hesitant to acquire the flu vaccine. Along the same lines, this critical analysis of the literature focused on the factors that influence workers in the healthcare field to obtain the vaccine. In addition, I determined what promotional techniques have had the most impact in increasing the rates of influenza vaccination among healthcare workers. After combining literature to determine these factors, I developed an evidence-based plan of action to further increase the rates of flu vaccination among this particular population of individuals. The purpose of this inquiry was to develop a nursing plan and promotional strategies that will have the most impact on increasing the rates of influenza vaccination compliance among healthcare professionals.

Literature Review

Through this literature review process, a number of databases including Academic Search Premier, CINAHL, EBSCOhost, Health Source: Nursing/Academic Edition, MEDLINE, and many others were used in order to find data regarding influenza vaccination compliance, noncompliance, and hospital protocols of influenza vaccination. The CDC website was also used as a reference throughout the study. Search terms such as influenza, influenza vaccination, influenza vaccination compliance among healthcare workers, refusal of influenza vaccination, and vaccination promotion in healthcare were used in order to find current research materials. Over 150 articles were identified. From these sources, the studies used in this literature review were chosen based on the number of participants in the study, how current the data is, and how related the sources were to the purpose of this study. Articles omitted were those that failed to use an adequate number of participants or were outdated.

Motivators for Influenza Vaccination

In order to best predict what methods will have the greatest effect on increasing the influenza vaccination rates among healthcare workers, reasons for employee compliance to the vaccination—why these professionals are willing to receive the vaccine—warrants exploration first. A study conducted by Ludwig-Beymer and Gerc (2002) found that 84% of the 999 healthcare employees they surveyed reported their reason for getting the vaccine was “to stay healthy” (p. 6). Multiple studies have found that prior vaccination positively influenced whether or not an individual will obtain the vaccine again. Mayo and Cobler (2004) determined that 93% of their 436 participants in their survey stated that the top motivator for these patients to be vaccinated was their

previous vaccination. Along the same lines, another study reported that 63% of their participants had received the vaccine previously and were receiving the vaccination again (Ludwig-Beymer & Gerc, 2002).

In the Mayo and Cobler study (2004), the second highest motivator was provider recommendation. Sixty-two percent of participants in this study were greatly motivated and compelled by the recommendations of their healthcare provider to obtain the vaccine. Additionally, 56% of participants listed convenience in access to a medical office to get the vaccine as a top motivator to compliance (Mayo & Cobler, 2004). Thirty-four percent of participants reported the lack of cost of the flu vaccine as a primary encouraging factor for being vaccinated (Mayo & Cobler, 2004, p. 406).

Numerous demographic variables have been identified to have an impact on flu vaccination decisions. African Americans and Hispanics are more reluctant than Caucasian individuals to receive the vaccine (USDHHS, 2000). Females are more likely to comply with flu vaccination than are males (Ludwig-Beymer & Gerc, 2002). In a study conducted by Ludwig-Beymer and Gerc (2002) and a work compiled by Tracey Heimberger, Hwa-Gan Chang, Muhammad Shaikh, Lois Crotty, Dale Morse, and Guthrie Birkhead (1995), influenza vaccination rates were directly proportional to increasing age. Healthcare workers who reported having been diagnosed with “heart disease, hypertension, diabetes mellitus, or pulmonary disease also were more likely to be vaccinated” (Heimberger, et al. 1995, p. 412). In addition, people who do not smoke were more apt to receive the vaccine than those who do smoke (Ludwig-Beymer & Gerc, 2002).

Ethical idealizations also play their role in an individual's vaccination decision. Patients coming to a healthcare facility “trust that the professionals and the institution will take all necessary safety precautions” needed during their stay and be mindful of their limited ability to make their own choices and minimal amount of options (Tilburt, et.al., 2008, p. 28). Because of this, “mandatory influenza vaccinations for healthcare workers is ethically imperative” (Tilburt, et.al, 2008, p. 28). Notably, “knowledge that healthcare workers can transmit influenza to their patients, that patients can die from influenza, or that there is a national policy for healthcare worker vaccination was not associated with receiving the vaccine” (Heimberger, et al., 1995, p. 413).

Other factors that motivate healthcare professionals to obtain the vaccine include recommendations from their medical provider, the media, and their friends and family to acquire protection from influenza (Mayo & Cobler, 2004). Additionally, the convenience of the vaccination location and having no charge to acquire the shot also increased the likelihood for healthcare worker compliance. Individuals who received a postcard reminder about obtaining the vaccine and those who were readily in close contact with others who have the flu have higher rates of influenza vaccination (Mayo & Cobler, 2004).

Barriers to Influenza Vaccination

Equally important to explore are the reasons for noncompliance with influenza vaccination in the healthcare field—why individuals choose not to receive protection from the flu through vaccination. A study identified a number of reasons for noncompliance including: being too busy, inconvenient venue, the side effects of the

vaccination, never having had the flu, being ill at the time of their scheduled vaccination, and thinking that the vaccine is not protective (Qureshi, et al., 2004).

A study determined that 35% of their sample (N=436) chose the side effects of the vaccine as their main barrier and inhibitor for their choice not to obtain the vaccine (Mayo & Cobler, 2004). Another study (Heimberger, et al., 1995) reported the same barrier: 35% of its 922 surveyed employees listed their reason for noncompliance as the fear of contracting any of the side effects of the vaccine. In the study performed by Mayo and Cobler (2004), 30% of participants stated that the fear of contracting the flu was what kept them from obtaining the vaccination. Additional reasons for reluctance to the vaccine include the presence of potent neurotoxin in the vaccine, mercury-based preservative in bulk flu vaccines, risk of allergic reactions, and risk for oculo-respiratory syndrome and Guillain-Barre syndrome (Crowe, 2005).

Many individuals use other ways to protect themselves from the flu that they view as more effective than the vaccination and that have fewer potential side effects. These alternatives include exercising, maintaining a positive outlook, having greater social interactions, taking daily multivitamins, and increasing anti-oxidants in one's daily diet (Crowe, 2005). All of these methods strive to increase one's immune system in general rather than receiving a vaccination to build specific body defenses for influenza. Some people do not consider vaccination as a guarantee that they will remain free from illness during the winter months and flu season. As David Crowe pointed out in his article entitled *One Bad Shot* (2005), "only about 10% of upper respiratory tract infections are due to influenza viruses, even during peak flu season, and flu vaccines are made before the most common strains for that season are known, so they do not always contain the

most common strain” (p. 66). Therefore, some people find it pointless and unnecessary to make efforts to get the influenza vaccination when it may not provide them with any protection from illness.

Additional barriers were reported by the Mayo and Cobler study (2004). Barriers identified as contributing to noncompliance with influenza vaccination included: fear of needles, fear of contracting the flu, fear of becoming ill from vaccine, having received no recommendations to obtain the vaccine, unable to obtain the vaccine, unable to get to a vaccination location, no appointment with their provider during flu season, too high of a cost, too ill to obtain the vaccine, pregnant and thought that they could not receive the vaccine, and egg allergies.

Promotional Strategies to Increase Influenza Vaccination Rates

In order to increase influenza vaccination rates among healthcare workers, various organizations and facilities have begun to implement a number of programs and other initiatives to raise awareness and compliance to vaccination. Perhaps one of the most beneficial of these promotional strategies was enforced by the Joint Commission. In 2007, the Joint Commission on Accreditation of Healthcare Organizations approved an infection-control standard “that requires accredited organizations to offer influenza vaccinations to staff, including volunteers and licensed independent practitioners with close patient contact” (CDC, 2010a). By offering the vaccine to its employees free of charge, these accredited facilities hope to entice more individuals to become protected from the influenza virus and, as a result, maintain infection control of the flu within that organization.

The CDC (2007) developed their own strategy in an attempt to increase healthcare worker influenza vaccination rates. The CDC began to pressure hospitals to use declination statements for workers who choose not to receive the flu vaccine. Healthcare workers must sign a declination statement in a number of facilities saying that they were offered the vaccine but refused to take it. Some statements may ask why those individuals chose not to get the vaccine; others require that healthcare workers acknowledge that they are knowingly and willingly putting their patients at risk. This declination statement is to be used as an incentive to motivate nurses and other medical professionals to obtain the flu vaccine (CDC, 2007).

Education plays a crucial role in compliance to influenza vaccination. People must be aware of what the vaccine is, how it works, its side effects and risks as well as the correct beliefs to the misconceptions that have been created regarding the vaccine. In one study (Kimura, et al., 2007), an educational campaign was implemented “that clarified misconceptions about influenza and the vaccine and emphasized the seriousness of influenza” (p. 685). In this same study, they also started a “Vaccine Day” which “addressed accessibility issues by providing free vaccinations” at a particular facility (Kimura et al., 2007, p. 685). This study concluded that when used by itself, the educational initiative showed little, if any, impact on increasing vaccination rates. However, when used in conjunction with the Vaccine Day, 53% of the individuals received the vaccine as compared to only 34% of the people in the control group (Kimura et al., 2007).

An article entitled *Different Techniques Help to Increase Influenza Immunization* (Green, 2006) noted, “education is very important but peer pressure by co-workers is an

added benefit” to increasing compliance rates (p. 127). The particular hospital that is mentioned in this work set up a form of role-playing game for each unit. Through this game, individuals who had not received the flu vaccine were publically displayed for being noncompliant. The intention was that this embarrassment would compel those individuals enough to make them obtain protection.

When developing promotional programs and actions, there are several key elements that should be included. According to Ludwig-Beymer and Gerc (2002), these essential components are as follows: “education, access, no charge, and incentives” (p. 2). Education about the vaccine, its side effects, and modes of transmission helps employees make a well-informed decision about whether or not to be vaccinated and corrects previous false beliefs about the vaccine itself. Having the vaccine readily available and easy to access during convenient, regular hours also contributes to higher rates of vaccination compliance. Ludwig-Beymer and Gerc (2002) reported that offering the vaccine free of charge to healthcare employees as well as giving those individuals incentives as an additional encouraging factor further enhanced compliance to vaccination.

Visual aids have been shown to be influential in healthcare employees’ decision-making when it comes to influenza vaccination. Findings from a particular study (Qureshi, et al., 2004) showed “healthcare workers are willing to accept voluntary immunization offered in the workplace and promoted using visual devices such as posters” (p. 200). This research also identified certain components that should be addressed on these posters, visual aids, and reminders that will best reinforce the need for healthcare workers to be vaccinated. Such items are that “the purpose of the campaign

needs to be promoted consistently and concerns about the side effects should be addressed” (p. 200).

One can see that there have been several attempts made with the intention of increasing the influenza vaccination rate among healthcare professionals. However, the actual vaccination rates for these particular individuals remain low. Additional research and program implementation are warranted to continue raising the rates of compliance to near 100%.

Research Questions

Q1: What are the main barriers prohibiting healthcare professionals from obtaining the influenza vaccine?

Q2: What are the primary motivators for compliance to flu vaccination among healthcare workers?

Q3: What are some promotional actions that have been implemented to encourage higher rates of vaccination? How successful were these interventions?

Q4: What is the best evidenced-based practice to be initiated in order to provide the most increase in influenza vaccine compliance?

Methodology

Nursing is an ever-evolving profession—continuously growing, expanding, and improving its practices incongruence with the latest research findings. Evidenced-based practice is defined by Burns and Grove (2011) as “the conscientious integration of best research evidence with clinical expertise and patient values and needs in the delivery of quality, cost-effective healthcare” (p. 465). To clarify, best research evidence can be further classified as coming “from the conduct and synthesis of numerous, high-quality studies in a health-related area” (Burns & Grove, 2011, p. 465). Evidenced-based practice can be further categorized into subgroups. The particular category that this study will use is called an integrative review of literature. This specific methodology can be described as “the identification, analysis, and synthesis of research findings from independent quantitative and sometimes qualitative studies to determine the current knowledge (known or unknown) in a particular area” (Burns & Grove, 2011, p. 473).

Having defined what type of methodology this research utilized, this practice can be further individualized to fit this particular work. A systematic review of the research literature has already been conducted concerning influenza vaccination rates among healthcare professionals and studies regarding promotional strategies used to help increase such rates. The following guidelines, as Burns and Grove (2011) outline in their book entitled *Understanding Nursing Research: Building an Evidence-Based Practice*, was followed for all research articles used in this work:

1. Were the purpose and scope of the integrative review clearly identified?
2. Were the questions to be answered or hypotheses to be tested by the review identified?

3. Were the criteria for inclusion and exclusion of studies in the review stated?
4. Was the literature search for relevant studies to include in the review described?
5. Was the adequacy of the number of studies included in the review?
6. Did the authors develop a questionnaire or describe how they consistently gather information from quantitative and qualitative studies?
7. What criteria were used to evaluate the scientific quality of the studies?
8. Were the data from the studies analyzed in a systematic fashion?
9. Were the findings from the review expressed in a clear, concise, and complete manner? (p. 474)

By analyzing each piece of research in this manner, the most effective nursing practices regarding the influenza vaccine were identified as well as the creditability and reliability of the articles used. Such analysis enabled the strengths of each study, the gaps in the research that need further evaluation, the relating factors of all works examined, and the framework for future interventions and actions to be determined (Russell, 2005). The research articles used for evaluation focused on influenza vaccination rates among healthcare workers in the United States, reasons people choose to comply with vaccination, the barriers that inhibit individuals from adherence, as well as the various methods that have been implemented in hospitals throughout the United States to help promote increased rates of flu vaccination among its workers and the effectiveness of such implementations.

Using the data collected, the information was compiled into one, concise plan of nursing action. This plan outlined the most effective promotional strategies, the ways to

increase the motivational factors for compliance, and the methods to decrease the barriers to influenza vaccination as presented by the articles researched.

Results

After completing an integrative review of literature, the answers to the research questions proposed were readily abundant. The primary barriers for health care professionals to not obtain the influenza vaccine included things such as lack of convenience in availability, cost, and the fear of contracting the flu from acquiring the vaccine or developing any of the side effects of the vaccine. Others stated that they chose to use other means of protection from illness rather than having to become vaccinated to stay healthy.

There was also ample evidence as to why health care workers do obtain the influenza vaccination. Such reasons included provider recommendation, lack of cost, and the ease of availability. The primary and recurring reason that these individuals did get the vaccine was due to the fact that they had received a vaccine previously and did not contract the flu.

Many hospitals have implemented a number of protocols and procedures in order to increase vaccination compliance rates in their facilities. Such measures included a mail out reminder to all employees notifying them that it is the time of year for them to obtain the vaccine as well as offering the vaccine to employees free of charge and at convenient times. Additional implementations were increasing staff education regarding the vaccine, requiring declination statements for those who do not obtain the vaccine, and posting visual aids around the hospital to serve as an additional reminder to obtain the vaccine. Although several hospitals did develop these new protocols, the actual compliance rates in those facilities for influenza vaccination still remain low.

In order to most increase the compliance of health care professionals to obtain the vaccine, all promotional strategies should be combined in to a new protocol that demonstrates the most effective evidenced based practices. The motivators for compliance should be amplified while the barriers should be eliminated as much as possible. By incorporating all of the things that have shown to increase compliance and removing those that have shown to hinder it, hospitals will be able to best increase the influenza vaccination compliance rates in their facilities.

Case Study

The following is a hypothetical hospital needing reform of their protocol regarding flu vaccination among its employees. This case study will consist of a description of the hospital's location, employee composition and size, departments, and current flu vaccination practices for its healthcare workers. Based on a critical analysis of the literature, a newly developed hospital protocol will be presented as a possible solution to increase vaccination rates of the hospital's employees.

Hospital Information

Bob W. Smith Hospital is located in the heart of downtown Hattiesburg, Mississippi. The hospital serves a population of approximately 50,000 residents and has yet to receive magnet status despite initiating efforts more than 5 years ago. The hospital has the following departments: surgery, emergency services, intensive care, labor and delivery, oncology, pediatrics, cardiovascular, and pulmonary. This 600-bed facility has a total of 4,000 healthcare workers- 400 physicians, 2,600 nursing personnel (nurse practitioners, registered nurses, licensed practical nurses, and nurse technicians), 500 social services and public relations individuals, and the remaining 500 dietary and custodial services workers.

Currently, the hospital has a healthcare worker influenza vaccination rate of 35%. Every year, the hospital sends out an email notification during the month of September reminding their employees that it is time for their annual flu vaccination. The healthcare workers must either turn in some form of documentation signifying that they have received the vaccine or fill out a form that states that they have declined vaccination. No other incentives or reprimands are enforced by this hospital. After reviewing the

percentages of vaccine compliance, the hospital has decided to re-evaluate their current promotional strategies concerning influenza vaccination in order to increase compliance and, thereby, increase patient safety from influenza infection, minimize employee absenteeism, and curtail healthcare cost.

New Hospital Protocol

I. Scope

This policy applies to all healthcare professionals working at Bob W. Smith Hospital in Hattiesburg, Mississippi. This includes all employees, including physicians, nurses, technicians, social workers, public relation individuals, as well as the kitchen and cleaning staffs.

II. Purpose

The purpose of this policy is to implement hospital protocols for healthcare workers to obtain the influenza vaccination. By adhering to this policy, medical staff and other employees will help to decrease the rates of influenza infection in the hospital setting and, therefore, create a safer environment for their patients and themselves.

III. Policy

1. All employees of Bob W. Smith Hospital are highly encouraged to obtain the influenza vaccination between September 15th and October 15th of each year.
 - a. Individuals who receive the vaccine must turn in written documentation as proof by October 15th. See Appendix A, the Influenza Immunization Record.

- b. Individuals who opt not to acquire influenza vaccination must fill out a declination statement by October 15th. See Appendix B, the Influenza Vaccination Declination Statement.
2. The hospital must make flu vaccinations available to employees at no cost.
 - a. Flu vaccines will be made available to staff Monday-Friday, 8:00 a.m. until 5:00 p.m. starting on September 15th and ending on October 15th. Vaccines will be given in a designated location.
 - b. Hospital workers should be exempt from providing monetary reciprocation for the vaccination if they receive their vaccination through Bob W. Smith Hospital.
3. Posters concerning influenza vaccination must be placed throughout the facility.
 - a. Posters should display how the benefits of flu vaccination outweigh the side effects of the vaccine, the truth regarding contraction of the flu with vaccination, and information of how and when to acquire vaccination.
 - b. Posters should be displayed by September 1st of every year.
 - c. Posters should be displayed in every patient's room, at all entrances to the hospital's facility, and at each nursing station or welcome desk.
4. All employees are required to attend a mandatory informational session every two years regarding the influenza vaccination.
 - a. The educational workshop should address what the vaccine is, when and how to obtain it, its side effects, its benefits, as well as eliminate

any fears individuals may have about receiving the vaccine. See Appendix C for an example of an appropriate, educational slide show to be used during this informational session.

- b. The policy for influenza vaccination will be reviewed.
 - c. Questions and concerns from hospital employees will be addressed at this time.
5. Mail out reminders should be sent to all hospital personnel on September 1st every year at their home address.
- a. Reminders should provide the times of influenza vaccination availability at the hospital and the due dates for all forms.
 - b. Additional email reminders will be sent on September 15th.
6. All hospital employees will be offered incentives if they acquire the influenza vaccination.
- a. Incentives include awarding the first ten individuals who receive the vaccine with a \$50 gift card and/or allowing everyone who chooses to get the flu vaccine to enter their name into a raffle drawing for \$500.
 - b. Units receiving 100% compliance rates will receive additional incentives.
7. Reprimands will be implemented for those who opt out of becoming vaccinated.
- a. Reprimands include publicly displaying the names of those who did not get vaccinated in the break rooms of every unit.

- b. Lists of units and their compliance rates will be posted in every unit to serve as additional encouragement and competition.
8. All hospital employees are required to promote the influenza vaccine to their patients.
 - a. Healthcare providers must provide patients with information regarding how and when to get the vaccine, discount myths, emphasize the benefits of acquiring the vaccine, and answer any questions they may have.
9. The policy for influenza vaccination should be reviewed annually to determine its effectiveness on increasing vaccination compliance as well as to review its impact on the hospital staff. Modifications should be made accordingly.
10. A board of hospital administrators will be appointed to implement and regulate the influenza vaccination policy.

IV. Appendices

1. Appendix A- Influenza Immunization Record
2. Appendix B- Influenza Vaccination Declination Statement
3. Appendix C- Influenza Vaccine Educational Slide Show

Discussion

Increasing influenza vaccination rates among healthcare professionals is necessary to improve patient and employee safety from influenza infection. In order to improve influenza vaccination rates, new hospital protocol is needed to both increase promotional strategies for vaccination as well as decrease barriers to obtaining the vaccine among employees. This research has defined some of the most common motivators and barriers healthcare professionals have for acquiring the vaccine and some of the current practices hospitals are implementing in order to increase influenza vaccination compliance among its workers. From this information, new hospital protocol was developed, combining best nursing practices to promote optimal improvement in compliance.

For nurses, this study demonstrates the responsibility of providing a safe environment to patients in the hospital setting. By acquiring the vaccine, nurses and other healthcare professionals are protecting their clients from nosocomial influenza infection. The nurse has a duty to provide the safest, most effective care to his or her patients; obtaining the influenza vaccine is needed to provide such care.

The hospital policy developed gives healthcare professionals a choice in whether or not they wish to obtain the vaccine. However, when they do not become vaccinated, those individuals are informed of the dangers of their actions on their patients and the people with whom they come into contact. The policy also outlines a means of educating hospital workers about the flu, the vaccine, and the hospital policy. From this reminder, workers are refreshed of what they need to do regarding acquiring or declining

vaccination. It also serves as an outline for patient teaching concerning the flu and how to prevent infection.

The methodology used in this study should be modified for future research on this topic. While the method used to select which articles to include in this study did allow for current, relevant studies to be the focus, there could be more criteria set to refine the article selection process. Further research is needed to determine the effectiveness of the new protocol developed in increasing influenza vaccination rates in the hospital setting. Additional research should then be completed in order to determine the effect of the new protocol on the staff of the facility.

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Appendix A

INFLUENZA IMMUNIZATION RECORD

Hospital employees who choose to acquire the influenza vaccine must fill out this form and return to Human Resources by October 15th.

NAME: _____

DATE: _____

PROVIDER: _____

PROVIDER SIGNATURE: _____

SERUM MANUFACTURER: _____

By choosing to acquire the flu vaccine, your name will be entered in to a raffle drawing for a \$500 cash prize. Please fill out the following information to be used for the drawing.

NAME: _____

DEPARTMENT: _____

PHONE NUMBER: _____

Appendix B

INFLUENZA VACCINATION DECLINATION STATEMENT

Hospital employees who choose not to acquire the influenza vaccine must fill out this form and return to Human Resources by October 15th.

NAME: _____

DEPARTMENT: _____

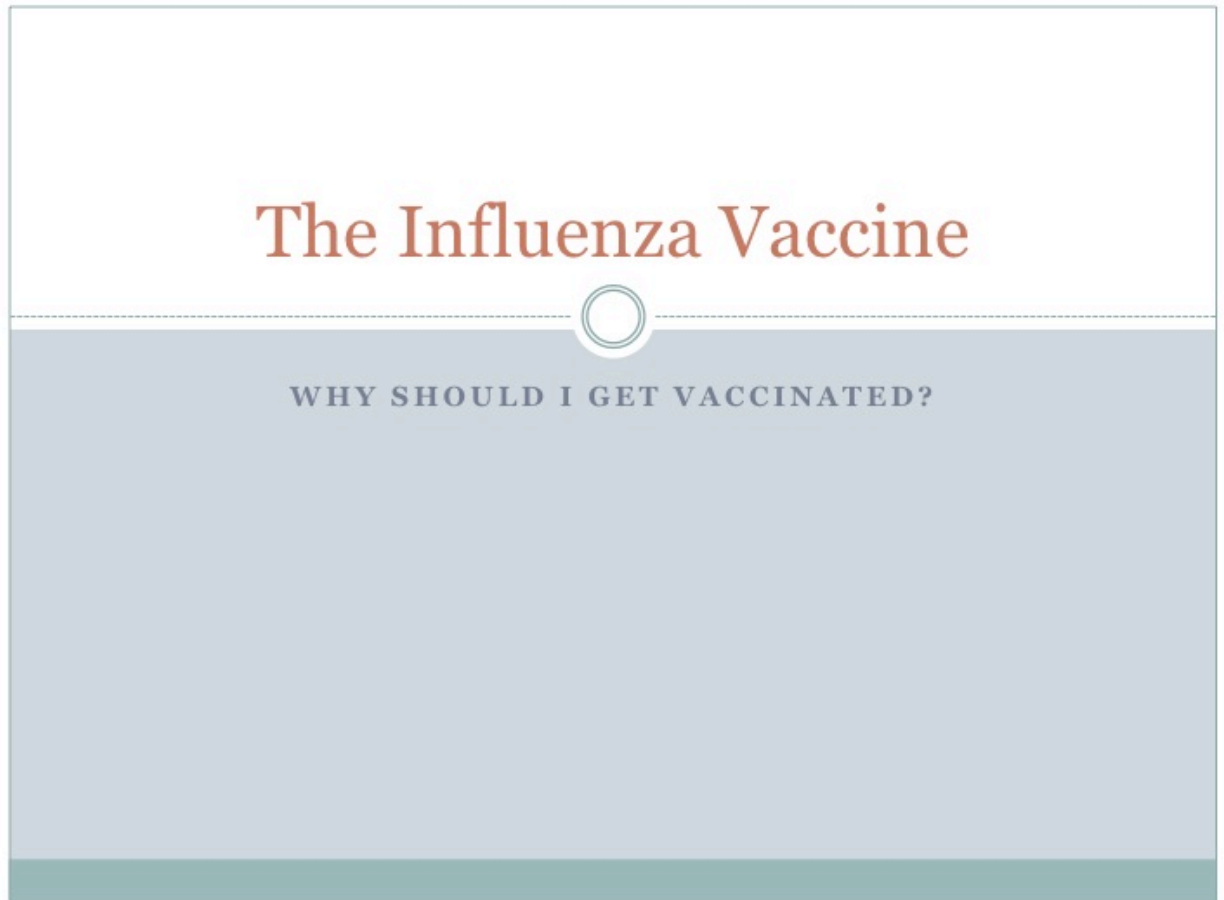
As an employee of Bob W. Smith Hospital, I have been recommended to receive the influenza vaccination in order to protect my patients and myself. I am fully aware of the following:

- Influenza is an extremely contagious and serious respiratory tract infection, causing death to thousands of Americans yearly.
- Acquiring the vaccine is the best means of protection from obtaining the influenza virus.
- I cannot contract the flu by getting the vaccine.
- If I become infected with influenza, I can transmit the virus to my patients who are already immune-compromised.
- By not obtaining the vaccine, I am putting my coworkers, my patients, my friends, and family in danger of contracting the life-threatening illness of influenza virus.

However, I have chosen to refrain from obtaining the influenza vaccine for the following reason(s): _____

Signature: _____ **Date:** _____

Appendix C



It's that time of year again for flu vaccinations! In order to fully understand the benefits of the vaccine and to best relay those benefits to our patients, we have put together a short presentation regarding the flu vaccine. This will also help us all to refresh our memories of the importance for all of us healthcare professionals to receive the vaccine and the hospital protocol involving just that.

What is Influenza?



- An acute upper respiratory tract infection
- Extremely contagious
- Affects 5-20% of U.S. population yearly
- Causes 23,600 deaths on average
- Signs and Symptoms:
 - Severe headache, muscle aches, fever, chills, fatigue, weakness, anorexia

To begin, influenza, more commonly known as the flu, is an acute upper respiratory tract infection that affects a large portion of our population every year. It is highly contagious and can cause an average of 23,600 deaths each year here in the United States. Some of the most common signs and symptoms of having contracted the flu are severe headache, muscle aches, fever, chills, fatigue, weakness, and anorexia.

What is the Flu Vaccine?

- Intramuscular injection that provides protection from influenza
- Composed of three different strains of influenza
 - The most probable strains for prevalence
- Killed, inactive form of the virus

The flu vaccine has been created to provide immunity from the actual virus to those who receive. It is an intramuscular injection that is composed of three different strains of the flu vaccine. Those strains are whichever versions of the virus are most likely to be prevalent during the year's flu season. It is extremely important to note that all of the strains are a killed, inactive form of the virus. Therefore, it is not possible to acquire the flu from the vaccine.

The Basics



- **Flu Season**
 - Begins in October and ends in April
- **Vaccination Time Frame**
 - September
 - As soon as the year's vaccine is available

Flu season begins in October and continues until April. In order to get the most protection from the vaccine, it is recommended to acquire vaccination in September or as early as the year's vaccine is made available for use.

Benefits of Vaccination

- **Personal Protection**
 - Maintaining adequate hospital staffing
- **Patient Protection**

There are several benefits to getting the flu vaccine. Of course, the vaccine provides you personally with protection from the virus, keeping you healthy and free from the flu during its season. By you staying healthy, this means that the hospital will experience fewer staffing shortages because there will be less employees getting ill from the flu and more who are healthy and able to work. By you being vaccinated, you will prevent the transfer of the flu from you to your patients thereby decreasing the number of nosocomial infections of influenza to those who are admitted.

Discounting False Beliefs

- Can you get the flu from the vaccine?
- Why do some people not feel well after getting the vaccine and report flu-like symptoms?

One of the most frequent concerns regarding the flu vaccine is that getting the vaccine can cause you to get the virus. As mentioned previously, the vaccine contains a killed, inactive form of the virus and cannot cause the flu virus. This is very important information to relay to our patients. Along those same lines, it is also necessary to explain to them why some people may not feel well and may even report flu-like symptoms after getting the vaccine. Those individuals may have encountered the virus a week or two prior to getting the vaccination and had no time for the vaccine to take effect and would have contracted the virus anyway. They may have contracted a different form of respiratory tract infection that is not the flu but causes similar symptoms. It is possible

that they may have a different strain of the flu that was not provided in the vaccine and therefore, they were not immune from that particular strain.

Hospital Protocol Regarding Flu Vaccination

- **Documentation Requirements**
 - Influenza Immunization Record
 - Influenza Vaccination Declination Statement
- **Vaccination Availability and Affordability**
 - September 15th-October 15th
 - Monday-Friday, 8 a.m.- 5 p.m.
 - No fee for hospital employees

Now that we have reviewed the basics of the influenza vaccine itself, we will now take a look at our hospital protocol regarding employee vaccination. There are two forms of documentation available, one is required of each employee. The Influenza Immunization Record is used by those who choose to acquire the vaccine. The second, the Influenza Vaccination Declination Statement, is for those who opt out of getting the vaccine. Vaccines are available for hospital employees every Monday through Friday from 8 a.m.- 5p.m. starting on September 15th-October 15th. And they are free for all hospital employees!

Hospital Protocol Regarding Flu Vaccination

- **Increased Awareness**
 - Posters
 - Informational Session
 - Mail Out Reminders
- **Incentives**
- **Reprimands**

In order to increase both employee and patient awareness of the need for influenza vaccination, there will be posters placed in every room, entrance, and nursing station through out the entire hospital. As our protocol states, we are holding an informational session regarding flu vaccination and the hospital protocol concerning vaccination of its employees. The hospital also annually sends out reminders to all hospital personnel notifying them of the availability of the vaccine and reminding them of the required documentation. Our incentive for getting vaccinated for this year is a raffle drawing. Every employee who gets vaccinated will put their name into a drawing to win \$500 cash. Conversely, those who do not become vaccinated will have their names posted in the break room of each floor in the hospital.

Hospital Protocol Regarding Flu Vaccination

- **Informing Your Patients**

- How? When?
- Emphasize benefits
- Discount false beliefs
- Answer any questions or concerns

It is also stated within our protocol that we, as health care professionals, must inform our patients of the need to get the flu vaccine. Our patients need to be informed of how and when they can acquire the vaccine. We must emphasize to them the benefits of the vaccine as well as discount any false beliefs and answer any questions they may have.

Any Questions???