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Barriers to the Influenza Vaccination in Veterans

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
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Abstract

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MSN, University of Phoenix, 2003

BSN, Troy State University, 1994

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

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Abstract

Influenza is the eighth leading cause of death in the United States, accounting for 56,000 deaths annually and leading to an average of more than 200,000 hospitalizations every year. Adults 65 years of age and older account for 50% to 60% of influenza-related hospital admissions and an estimated 90% of influenza-associated deaths occur in people age 65 and older. During the 2011 to 2012 influenza season, approximately 50 % of veterans between 45 and 70 years of age refused the influenza vaccine within the metro-area outpatient Veteran Administration (VA) facility in Atlanta, Georgia. The aim of this project was to identify and to identify barriers to influenza vaccinations in veterans. The health belief model was utilized to organize the evidence-based practice data obtain from the literature reviews on the barriers to the influenza vaccine. An Influenza vaccination educational pamphlet was developed using data obtained from the literature reviews. No information was obtained from the veterans. The educational pamphlet listed the identified barriers and ways to overcome the barriers to the influenza vaccination. The influenza vaccination educational pamphlet will be utilized by veterans and staff in the outpatient clinic. The pamphlets will to be placed in the veteran's waiting areas, medication rooms, and lobby areas prior to the beginning of the influenza season at the end of September. The organization's outpatient quarterly influenza data report will be utilized to disseminate the results to the educational tool's effectiveness after implementation at the end of the influenza season in May. The social impact of solving this issue is the opportunity to decrease the major infrastructure demands placed on the healthcare system as well as human suffering caused by influenza.

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Dedication

This project is dedicated to all the nurses who work tirelessly to provide care to the veterans who fought for the freedom for us to practice in an environment of peace. My commitment to strive to improve this care by advancing my knowledge is one way of returning the favor.

Acknowledgments

First, I would like to thank my committee members, Dr. Cathleen Colleran-Santos, Dr. Mary Tan, and Dr. Dana Leach for their guidance, patience, and encouragement. Your assistance during this program has been very instrumental to my success. My mentor Dr. Amiee Manion has been my anchor during this entire program, and without her patience, skills, and love for the profession, my experience would not have been as meaningful. You are truly an asset to the nursing profession.

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Lastly, I would like to thank Pastor Gary Dixon, Minister Starsky Jones, and Richard McCoy for your prayers, kind words, and thoughtfulness. Each of whom believed in me throughout the program.

Table of Contents

Section 1: Nature of the Project

Introduction

Influenza is the eighth leading cause of death in the United States, accounting for 56,000 deaths yearly and leading to an average of more than 200,000 hospitalizations each year (Healthy People 2020, 2011). In 2009, the H1N1 influenza pandemic caused roughly 270, 000 hospitalizations and 12,270 deaths between April 2009 and March 2010 (Healthy People 2020, 2011).

The performance improvement coordinator and the Veteran Health Administration (VHA) quality department collect data on the number of influenza vaccine refusals for each outpatient clinic and report the results monthly, quarterly, and annually. According to data collected by the VHA database, veterans between 45 and 70 years of age refused the influenza vaccine during the 2011-2012 influenza seasons nearly 50% of the time (Veteran Administration [VA] Outpatient Performance Improvement Report, 2013-2014). According to the VA Outpatient Flu Data Report (2014), 43% of influenza hospitalizations were among VA patients 65 year of age and older, and 51% were between 45 and 64 years old. The Centers for Disease Control and Prevention (CDC) reported that vaccinated patients can expect less severe illnesses and possibly prevent influenza occurrence (2012).

The Joint Commission has changed and expanded the elements of performance for Infection Control Standard IC.02.04.01 about influenza vaccination for independent practitioners and staff. This change, implemented in January 2012, set incremental influenza vaccination goals consistent with achieving the 90% goal by the national

influenza initiative for 2020. The U.S. Department of Health and Human Services Healthy People 2020 initiative was a written description of the method to discover influenza vaccination rates, evaluate reasons patients decline the influenza vaccination, improve vaccination rates toward the established 2020 goal of 90% at least yearly, and provide influenza vaccination rate data to key stakeholders (Department of VA, 2013).

After I reviewed this information and data reports, I identified the practice problem: Veterans between 45 and 70 years of age refused the influenza vaccine during the 2011-2012 influenza season approximately 50% of the time in a VA Georgia metro-area outpatient facility. In this paper, I aim to identify barriers to vaccinations and reasons for refusals by veteran using literature reviews.

According to the CDC (2014), people 65 years and older have been considered a high risk group for experiencing severe problems from the influenza virus. Generally, an estimated 90% of associated flu deaths occur in people age 65 and older. Influenza is considered a very serious disease for people 65 years and older because of weakened immune systems, which occur with aging (CDC, 2014).

Significance of the Problem

Influenza is the eighth leading cause of death in the United States, accounting for 56,000 deaths annually and leading to over 200,000 hospitalizations every year on the average (Healthy People 2020, 2011). In 2009, the H1N1 influenza pandemic caused approximately 270, 000 hospitalizations and 12, 270 deaths between April 2009 and March 2010 (Healthy People 2020, 2011). Each year, the influenza vaccine was manufactured based on research findings that suggest the influenza virus expected to be

most common during the following year's season. These viruses are the influenza A (H1N1) virus, influenza A (H3N2), and one or two influenza B viruses (CDC, 2011).

According to the CDC (2012), antigen shifts (the process by which two or more strains of a virus combine causing a new subtype of a virus) occur and, if effectively transmitted, can cause a pandemic. Principles of epidemiology included defining the occurrence (throughout the world), reservoir (influenza B and C affect humans and influenza an affect humans and animals), transmission (person to person by droplets from sneezing and coughing), pattern (usually December to March in temperate climates or throughout year in tropical climates), and communicability (day before symptoms begin up to five days after). This information was transmitted from the reporter at the local facility to the state facility, CDC, and then to the World Health Organization (Friis & Sellers, 2014).

Epidemics can cause widespread disruption to public life and organizations. In certain groups, such as the very young and older people, influenza may contribute to more serious morbidity and mortality. Complications include bronchitis and bacterial pneumonia (Chan & Wong, 2007). Pregnant women, those who are immunocompromised, and other at-risk groups may experience complications and are therefore eligible for a free influenza vaccination. Also, in 2011-12, only 14% of pregnant women received the vaccination despite increase awareness through influenza campaigns and free influenza vaccines (Chan & Wong, 2007).

The VA system is very proactive in the fight against the influenza virus. Influenza data used by the VA system is reported overtime from many different places such as

Healthy People 2020, Center for Disease Control and Prevention Seasonal Influenza (FluView) Report, VA Outpatient Data Report, and the VA Computerized Patient Record System (CPRS). See below for each data system's goals and objectives:

- Healthy People 2020's was an initiative developed to improve the nation's health using a 10-year agenda. Input for this Healthy People 2020 10-year agenda is obtained from various groups of individuals and organizations (Healthy People 2020, 2010). Its mission is to identify a nationwide increase in the public awareness and understanding of health, diseases, and disabilities using identified critical research, evaluation, and data collection methods to strengthen policies and improve practice (Healthy People 2020, 2010).
- Center for Disease Control and Prevention Seasonal Influenza (FluView) Report consists of weekly situational updates of influenza data across the Nation (Center for Disease Control and Prevention Seasonal Influenza FluView Report, 2014).
- The VA uses the Outpatient Data Report to collect and report monthly, quarterly, and yearly to multiple departments in the VA organization by the Performance Improvement department team on veterans and influenza prevalence and incidence rates.
- The VA Computerized Patient Record System (CPRS) is a VISTA software integrated patient record system that provides healthcare professionals with access to pharmacy, laboratory, radiology, allergy tracking, consults, dietary, progress notes, problem list, scheduling, vital signs, and other clinical factors

to manage patient care and records, as well as a proficient means for others to access and use patient information (CPRS Setup Guide, 2011).

Problem Statement

The Veteran's Administration Medical Center (VAMC) in Metro-Atlanta serves more than 130,000 veterans living in 50 counties and 10 Congressional districts in northeast Georgia. The VAMC consists of a tertiary medical center with 12 additional sites of care including Community Based Outpatient Centers and two Community Living Centers. The mission of the VAMC in Metro-Atlanta is to "Honor America's Veterans by providing exceptional health care that improves their health and well-being" (AVAMC website, n.d.).

In a report by the Healthcare Infection Control Practices Advisory Committee (HICPAC) and the Advisory Committee on Immunization Practices (ACIP), barriers were identified that prevented health care personnel in the United States from administering influenza vaccinations to patients. These reported barriers included inconvenience, inadequate time, perceived ineffectiveness of vaccine, medical contraindication, fear of vaccine side effects, fear of contracting influenza, reliance on home remedies, fear of needles, and avoidance of medications (Pearson et al., 2006). The report also included factors facilitating acceptance of the vaccine, such as a need to protect patients, self-protection, previously received vaccine, and perceived effectiveness of vaccine (Pearson et al., 2006). I identified the following problem statement: There are many barriers to the influenza in veterans. By understanding the attitudes and beliefs of the veterans and identifying the barriers, strategies such as the development of

educational tools, may help increase the acceptance rate. Based on this statement, I developed the following problem question: What are the major barriers to the influenza vaccination in veterans?

Summary

In summary, influenza was identified as the cause of a significant number of deaths each year. Approximately 90% of the deaths occurred in people 65 years of age and older. The veteran population was considered one of the most affected groups. Veteran ages 65 years and older accounted for 43% of the 200,000 hospitalizations and 51% were among ages 45 to 64. During 2011-2012 influenza season, veterans between 45 and 70 years old refused the influenza vaccine nearly 50% of the time. By understanding the attitudes and beliefs of the veterans and identifying the barriers, strategies such as the development of educational tools, was listed as one of the most effective ways to increase acceptance rate. The purpose of the project was to identify and demystify the barriers in an effort to improve the quality of care of the veteran and decrease the financial burden on healthcare facilities.

Section 2: Review of Literature and Theoretical and Conceptual Framework

Scholarly Appraisal of Literature

In a review of several scholarly peer-reviewed journal articles about veterans between 45 and 70 years old who refused the influenza vaccine, researchers listed a lack of education as a barrier to vaccinating. Thus, I believe a population specific education program will be a benefit to the veterans. Educational posters, brochures, and pamphlets have been known to be beneficial when appealing to veterans (VHA Seasonal Influenza Manual, 2014). Access to the influenza vaccine was not considered as a barrier because veterans have better access to the vaccine than the general public (Santibanez, Singleton, Santibanez, Wortley, & Bell, 2013).

Overall strengths noted in the review of literature were the populations identified were generalizable to males, females, pregnant women, and veterans. Limits noted related to gaps in the methods of data collection processes (Lucero et al., 2011; Santibanez et al., 2013) and standardization of education (Santibanez et al., 2013; Pelly et al., 2010). After thorough review of the literature, I noted several barriers.

Lucero et al. (2011) identified the following problem statement: "The Departments of Defense and Veteran Affairs reported influenza separately through infectious disease staff, methods, retrospective analysis, and biosurvelliance. (p. 56)" The weaknesses of this study were the limited results and data collection methods in some of the participating facilities, while the strength was that both facilities agreed to support the venture. Santibanez et al. (2013) studied all veterans, female, and males. This study can

be replicated, and a conceptual framework was noted through setting up the biosurveillance project.

Generalized Review of Literature

In a study by Brown et al. (2011), several authors assessed the rate of recurrence of the influenza vaccine usage among 3,858 elderly patients in their practice and the most common barriers to receiving vaccine (Brown et al., 2011). The authors computed the usage of seasonal and 2009 H1N1 vaccines among the elderly with their practice and surveyed a cohort of 64 patients to determine whether they had received the 2009 H1N1 vaccine or their reasons for not receiving it (Brown et al, 2011). Acceptance rates of seasonal influenza vaccine among elderly were low, and a substantial amount did not receive the 2009 H1N1 vaccine because it was unclear that they should receive it (Brown et al, 2011).

In the review of literature, lack of education was noted as the main barrier to veterans receiving vaccinations (Santibanez et al., 2013). Many of these barriers can be placed into two categories: internal (arising from veterans themselves) and external (organizational uptake). Examples of internal barriers included fear of needles and fear of contracting the influenza virus. Examples of external barriers included lack of supply of influenza vaccine and receiving the vaccine late into the 2012 influenza season.

Summary

Throughout my literature review, I noted several common barriers to patients receiving the influenza vaccination. These barriers included fear of becoming ill, fear of injecting a vaccine into the body, perception of vaccine as ineffective, previous bad

experience after receiving vaccine, and fear of needles. My literature review identified gaps of out of date literature and the financial and social impact of veterans not accepting the influenza vaccine, which was listed as causing an increased demand on major infrastructure and human suffering.

Section 3: Methodology

DNP Project Design

An educational tool was developed incorporating the barriers identified in the literature review as a quality improvement initiative. The educational tool also included material dispelling myths about the influenza vaccine. A seasonal influenza campaign was in effect at the VA outpatient clinic. The nine communication strategies outlined in the campaign included: Understanding communications as a framework for influenza vaccination, using goals to build strategies, understanding your target audience, addressing misconceptions, developing key messages, creating effective content, utilizing social media, applying the communication plan, and executing the plan (VHA Seasonal Influenza manual, 2014).

Though the VA clinic had a program in place aimed at educating veterans on the influenza vaccine, I noted an area that was lacking, namely addressing the veteran's misconceptions. The information in the manual was lengthy, imbedded within other information, not readily associated with the barriers, and require the veterans to have access the entire manual to obtain the information. The objective for the manual was to provide the healthcare providers, mainly nurses, with communication strategies and educational tools. This had not occurred. Many of nursing staff had not been given the opportunity to review or utilize the information to assist in demystifying the barriers to veteran vaccination.

DNP Project Method

Many educational programs and tools existed in the VA outpatient clinic area. What did not exist was an educational tool for veterans of all ages, such as a pamphlet or fact sheet, that identified barriers and demystified the barriers in a concise, simplified format. Using a pamphlet or fact sheet will provide the necessary education and be easily accessible for the veteran while waiting in the outpatient clinic lobby areas. In the review of literature, education was identified as a main barrier and was the premise for my development of an educational pamphlet. In this pamphlet, I also included other barriers to veterans' refusal of vaccinations followed by statements to demystify the barriers. According to the VHA Seasonal Influenza Manual (2014), the information listed below were some of the main causes concerning educational barriers and ways to demystify the barriers.

1. Fear of becoming ill from vaccine.
    - The best way to prevent the flu is to get the flu shot once a year.
    - You cannot get the flu from the flu shot.
    - A person who gets the flu shot, then the flu, was already possibly exposed prior to getting the flu shot.
    - The vaccine is not made from live virus.
2. Do not want the vaccine injected into body.
    - Vaccine approved by Food and Drug Administration.
    - Vaccine treated with a product to keep it safe.
    - Vaccine is monitored for safety.

3. Believe immune system is strong enough to fight the virus.
    - Because the virus changes every year, the next year you may not be immune.
    - You can spread the flu before showing any signs of the flu.
4. Never been sick with flu.
    - To increase the chances of not getting the flu from other people, a yearly flu shot is needed.
    - To protect you and your family, the flu shot is needed every year.
    - If you get the flu, the virus can cause a serious illness such as pneumonia.
5. Vaccine perceived as being ineffective.
    - Vaccine content is changed every year to prevent the flu.
    - The flu vaccine is considered at least 90% effective.
    - The vaccine is only good for one year.
6. Bad experience when vaccine was given.
    - Arm may become sore.
    - Mild fever may develop, but should only last 2 to 3 days.
    - If patient meets criteria, he or she may be able to receive nasal spray instead of by a needle. (VHA Seasonal Influenza Manual, 2014).
7. I am afraid of needles.
    - Patient may be a candidate for nasal spray vaccine.
    - Common side effects of nasal spray are nasal congestion and runny nose.
    - Not uncommon for people to be afraid of needles.

8. I don't have time to get flu shot.
    - VA has flu drives on the weekend.
    - VA has partnerships with local pharmacies.
    - May come to clinic without appointment for influenza injection (VHA Seasonal Influenza Vaccine, 2014).

I began the pamphlet development with identifying what the tool would and would not do. Next, I was conscientious about using simple language, thereby increasing the chances of the veteran understanding the information and outcomes. Then, I included additional information from websites in the pamphlet and encouraged staff to allow time during the visit to answer questions. The pamphlet was in a one page, two-sided format, 12 point or larger format, no acronyms, only spelled out words, simple one to two syllable words familiar to the veteran, and was void of images or illustrations that could have been considered insensitive.

Health education tools are more effective when coupled with other educational strategies. Simply providing access to pamphlets may not be enough to promote understanding and a change of behavior.

Population Health Problem Intervention

An intervention in epidemiology is considered as any scheduled or planned effort intended to produce changes in a target or particular population (Friis & Sellers, 2014). After a thorough review of the literature, I identified several interventions such as performing retrospective chart reviews, formalized educational literature, use of a design

or model to guide the interventions, review of literature from multiple data sites, nursing as well as non-nursing, and monitoring the outcomes (Friis & Sellers, 2014).

My focus will mainly be the development of an educational tool (pamphlet) with influenza information obtained from a review of the literature. The educational tool will identify barriers to veteran vaccination and information to demystify the barriers. The advantages of developing an educational tool is that it allows me to input health information specific to the targeted population. Pamphlets are readily accessible and inexpensive to use when placed in the outpatient clinic waiting areas and mass produced by the facility. These educational pamphlets can also be placed in medication rooms, lobby areas of the clinic, and nursing staff triage rooms so as to be readily available for the veterans.

Health Belief Model

The health belief model (HBM) is a valid and reliable tool for measuring beliefs. The health belief model was pioneered by Rosenstock (1966) and further refined by Becker and Maiman (1975). It offers a way to explore why individuals may decide to accept vaccination and, conversely, why they decline. In response to a specific health threat, such as contracting influenza virus, the HBM looks at an individual's perceptions related to the following:

1. Perceived susceptibility: This refers to a person's view that a health problem is personally pertinent or that a diagnosis of illness is correct.

2. Perceived severity: Even when one recognizes personal susceptibility, action will not occur unless the individual perceives the severity to be high enough to have serious natural or social complications.

3. Perceived benefits: This refers to the patient's belief that a given treatment will cure the illness or help to prevent it.

4. Perceived costs: This refers to the difficulty, duration, and accessibility of the treatment.

5. Motivation: Includes the desire to comply with a treatment and the belief that people should do what is desired.

6. Modifying factors: Includes personality variables, patient satisfaction, and socio-demographic factors. (Marchi, D., Thomas, J., & Swegar, K., 2012).

The HBM helps to organize the evidence-based practice (EBP) information, promote, and generate the changes to practice that will lead to positive patient outcomes. The HBM is an evidence based practice model presently being used in the outpatient setting. The outpatient clinics are using the HBM as a framework to guide their nursing practice. This model focuses on attitudes and beliefs of individuals and forms a basis for staff to build their plan of care (Grove, Burns, & Gray, 2013).

Health Outcome and Social Impact

According to Benton (2012), unity within the profession is critical to guarantee that nursing's practice issues and concerns are heard. At the organizational level, policy

development for practice changes may be achieved by the following process: presenting the issue in a consistent and concise format; communicating a shared viewpoint, preferably through a group process; and establishing desired goals with timelines and evidenced-based practiced data to support the vision. Using peer-reviewed journal articles to build policy cases and being available for questions may also increase the probability of practice changes (Benton, 2012).

Implementing strategies such as increasing communication, the development of an educational tool, collaborating, increasing visibility, and using planned meaningful change processes may help when barriers occur during the development process (Ridenour & Trautman, 2009). The desired health outcome would be to identify the barriers to influenza vaccine in veteran population and improve educational offering to veterans in an effort to decrease influenza refusal rates. The social impact of solving this issue is the opportunity to decrease the major infrastructure demands placed on the health care system as well as human suffering.

Financial Impact

The costs associated with sickness-related absenteeism, the disruptions in work schedules, and the loss to society has warranted further evaluation. According to the (CDC) (2014), education and planning were identified as ways to decrease and protect people from the seasonal flu. Influenza produces a direct cost caused by a loss of productivity and medical treatment. The indirect cost generally stems from preventive measures (CDC, 2014).

In the United States, influenza is responsible for a total cost of over $10 billion per year (Poland, 2006). A 30% sickness rate and a three-week length of illness will result in a decrease in the gross domestic process by approximately 5%. An additional cost for treatment of 18 million to 45 million people could gross approximately $700 billion (Poland, 2006).

Definition of Terms

For the purpose of this project, the following definitions were used to guide this project.

***Barrier*:** A barrier was defined as a structure or idea preventing access. Types of barriers included access, equipment, psychological, and lack of medications.

***Veteran*:** A veteran was defined as a person previously a member of the armed forces.

***Influenza Vaccine*:** The influenza vaccine was defined as an annual vaccination given for a specific year to protect against the influenza virus using a vaccine (CDC, 2013).

Health Outcome and Evaluation

During the beginning stages of project, I identified and developed the evaluation plan and desired outcomes. The desired outcome for this project was the development of an educational tool (Kettner et al., 2013). The educational tool, which was a pamphlet, included barriers to veteran vaccinations and information to demystify those identified barriers. The pamphlets were to be placed in the veteran's waiting areas, medication rooms, and lobby areas during a specific time period. The organization's outpatient

quarterly influenza data report will be utilized to collect results related to the educational tool's effectiveness after implementation.

For this project, I implemented the four stages of evaluation as developed by Friss and Sellers (2014). The steps to this process included *formative evaluation*, *process evaluation*, *impact evaluation*, and the *outcome evaluation*. During the formative phase, the processes, plans, procedures, and potential problems were identified and evaluated. In the process phase, evaluation of the process and making sure the correct population and required data were being collected in the intended format and timeframe. The impact phase revealed the extent of the problem and the effects on the population, such as how many veterans in the specified age group refused or accepted to be vaccinated. The last phase, outcome, showed how well the program or process worked in obtaining the desired goal or outcome (Friss & Sellers, 2014).

Translating Evidence and Affecting Nursing Practice

Pearson et al. (2006) stated that the DNP prepared nurse, when translating evidence into practice, must have understanding of the barriers, which prevent the patients from achieving the desired goals. With relationship to this project that means understanding why patients are not being vaccinated. Healthcare Infection Control Practices Advisory Committee (HICPAC) and the Advisory Committee on Immunization Practices (ACIP) identified certain barriers that prevented health care personnel in the United States from being vaccinated for influenza. Researchers reported barriers including inconvenience, insufficient time, perceived ineffectiveness of vaccine, medical contraindication, fear of vaccine side effects, fear of contracting influenza, reliance on

home remedies, fear of needles, and avoidance of medications (Pearson et al., 2006). The researchers also included factors facilitating acceptance of the vaccine, such as the desire to protect patients, self-protection, previously received vaccine, and perceived effectiveness of vaccine (Pearson et al., 2006). Since patients and health care personnel have similar barriers, the translation of the findings into practice has the possibility of improving outcomes for other groups of individuals in society.

Evidence-Based Practice and the Policy Arena

Strategies such as increasing communication, collaborating, increasing visibility, and using planned meaningful change processes may help when barriers occur (Ridenour & Trautman, 2009). The DNP prepared nurse can use these skills to lead the translation of evidence to practice through contributions to policy development (AACN, 2006). The participation of the DNP prepared nurse in the process of policy development is vital to producing a health care system that meets the needs of its consumers.

New Evidence-Based Practices

Jennings and Burant (2013) reported that influenza is associated with high morbidity and mortality rates in the VHA system. It is projected that the number of veteran patients older than 65 years is expected to reach 2,437,000 by 2020. A disproportionate rate of this population will be using outpatient services because of having multiple chronic conditions that are further compromised if influenza virus contracted.

In 2009, a retrospective, cross-sectional study was performed in a Department of VA healthcare system where the participants were chosen (548,424 patient records).

Immunization rates were higher for men than women for influenza (73% versus 69%) and pneumococcal (87% versus 83%) vaccines (Bean-Mayberry et al., 2009). Bean-Mayberry et al. (2009) also showed that older female veterans had a lower rate of influenza and pneumococcal immunizations than male veterans age 65 years and older.

For this project, I concentrated on the number of veterans who did not receive the influenza vaccine, how many veterans contracted the influenza virus, and the age range of the veterans who did not received the vaccine. The practice guidelines for receiving the vaccine were taken from the 2011-2013 guidance (CDC, 2013; Healthy People 2020, 2011).

The Joint Commission has revised and expanded the elements of performance for Infection Control Standard IC.02.04.01 pertaining to influenza vaccination for independent practitioners and staff. Effective January 2012, the commission set incremental influenza vaccination goals consistent with achieving the 90% rate established in the national influenza initiative for 2020 and the 90% target for influenza vaccination goals established in the U.S. Department of Health and Human Services' Healthy People 2020 initiative. The commission's goal is to have a written description of the methodology to determine influenza vaccination rate, annually evaluate reasons given for declining the influenza vaccination, and improve vaccination rates toward the established 2020 goal of 90 percent at least annually (Department of VA, 2013).

The interactive FluView report is the influenza surveillance data from the 1997 to 1998 through the current season from the United States World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS)

collaborating laboratories and United States Outpatient Influenza-like Illness Surveillance Network (ILINet) (CDC, 2014). These data are assessed through the Flu View Interactive website. The VHA uses FluView to track outpatient influenza data and influenza related deaths (Center for Disease Control and Prevention, 2014).

Summary

Section three began with ways to approach the lack of education. I decided upon the development of a pamphlet with concise easy to read information and selected the informative evaluation process. I will translate the findings into practice through poster presentations and publications. Nurses who hold degrees in doctorate in nursing practice are on the forefront of policy making and by using evidence practice projects related to decreasing the spread of the influenza vaccine in veterans DNPs can demystify the barriers to vaccination leading to an improvement in the health and welfare of veterans.

Section 4: Findings, Discussion, and Implications

Strengths and Limitations

Strengths

According to Mauk (2012), presenting the DNP project to the organization where the project was implemented may aid in gaining support for other projects. Organizations also like knowing the findings so the results can be used to improve processes and patient outcomes (Mauk, 2012). Other strengths include providing a visual tool that is informal, colorful, and concise and provides an opportunity for dialogue.

Limitations and Challenges

The challenges to using literature review results included the increase probability of the data being out of date, becoming time consuming to perform a thorough literature review, and the lack of finances to continue the production of pamphlets. A limitation was the ability to thoroughly answer the DNP project question because of limited information from the literature review. Other challenges included a lack willingness of veterans to review the pamphlet information and a willingness to change behavior based on the pamphlet information.

Organizationally, I faced the challenge of obtaining approval by the internal review board (IRB) at the VA. According to the U.S. Department of Health and Human Services (2013), confidentiality issues may occur during data collection from patient charts and clinical reminders (Collaborative Institutional Training Initiative [CITI], 2014). For this reason, I decided to change from performing chart reviews to embarking on an extensive two facility IRB approval process to the development of an educational

tool from data retrieved from literature searches. After revisions were submitted, the IRB approved the proposal.

Another challenge was appealing to all veterans when attempting to formulate an educational tool. Younger veterans generally prefer an educational tool accessed through social media such as twitter and Facebook. Middle-aged veterans preferred access through myhealthe-vet, and older-aged veterans preferred more tangible educational tools such as pamphlets, brochures, and fact sheets.

Some other limitations included the timing of making the educational pamphlet available to veterans prior to the influenza season and accurately measuring the success of the educational tool and outcome. Influenza data is collected and distributed by the facility at the beginning, during, and end of the influenza season. Outcome data may not show a major change until at the end of the season.

A retrospective chart review would need to be completed to review the charts of veterans who previously declined the influenza vaccine. This review required IRB approval (Gearing et al., 2006). The outpatient VA clinic CPRS is the charting system utilized by the healthcare staff. Clinical reminders for the influenza vaccine are located in the CPRS database, educational information is also available on the site. Using a convenience sampling technique and collecting the information during a certain period of time, preferably one year after the pamphlet was implemented for use, would be sufficient to document outcomes (Gearing et al., 2006).

Alternatives and Solutions

Alternatives and solutions included obtaining educational materials related to the influenza vaccination from different governmental sites and databases such as Healthy People 2020, which contained input for the Healthy People 2020 10-year agenda. The Healthy People 2020 10-year agenda contained data obtained from various groups of individuals and organizations, including the Center for Disease Control and Prevention Seasonal Influenza (FluView) Report, which consists of weekly situational updates of influenza, and the VA Outpatient Data Report, which is a quality data report collected and reported monthly, quarterly, and yearly.

Another possible solution was to implement a different type of educational tool using the latest technology. However, the latest technology may not always be the best product for the veteran, for the content, or desired outcomes. Selecting an educational tool that would be best for different types of learners may prove to be more financially acceptable for the organization. Examples of alternative media include DVDs, game-based learning, PowerPoint presentations, brochures, publications, newsletters, and press releases. Videoconferencing and social media may also be alternative solutions to reinforce the goals and objectives of this project.

Several rules existed to prevent privacy breaches during my project. In order to prevent those breaches, I had to become familiar with each one. The Office for Civil Rights enforces the HIPAA Privacy Rule, which protects the privacy of individually identifiable health information. Other rules and regulations that I had to consider included: the HIPAA Security Rule, which develops national standards for the security of

electronic protected health information; the HIPAA Breach Notification Rule, which requires covered individuals and business companions provide notification following a breach of unsecured protected health information; and the confidentiality provisions of the Patient Safety Rule, which protect identifiable information being used to examine patient safety events and improve patient safety (U.S. Department of Health and Human Services, 2013). My decision to change from performing a chart review to the development of an appropriate educational tool for all age groups prevented the concerns related to confidentiality breaches.

Results and Implications

Implications for the project were to develop an educational tool (pamphlet) to demystify the barriers to the influenza virus in an effort to decrease veteran hospital admissions and deaths from influenza related pneumonia. Another implication was to generalize identified barriers and develop or obtain educational tools from peer-reviewed literature to demystify the barriers to the acceptance or refusal of other vaccines. Lessons learned included identifying ways to decide where to dissemination findings, identifying your target audience and importance, financial implications, and relevance to patient outcomes. The educational tool pamphlet was developed but will not be implemented for use until a month prior to the beginning of the influenza season starting in August-September and ending in April-May. The pamphlets will be placed in the lobby of the outpatient primary care lobbies, medication rooms, and nursing triage areas.

Analysis of Self

A practicum experience is designed to provide an onsite mentored experience. During the experience, the expectation of the DNP student was to utilize the skills and knowledge obtained during the program in the practicum setting. The practicum experiences impacted my progress in the areas of leadership, advance nursing practice, quality improvement, health outcomes, and health care policy.

As a Scholar

Since starting the Walden's Doctorate in Nursing Program as a student, the ability to understand and connect the gaps between scientific knowledge and evidence-based practice has been enhanced. The practice-focused doctorate has given me the opportunity to facilitate the process of putting evidence into practice as a nurse leader and scholar in the practicum settings.

As a Practitioner.

Combined with the skills of resource allocation, quality management, and the development of interpersonal relationships with the stakeholders, patient outcomes were impacted in a positive manner. Interactions with the organizational leadership team and peers afforded me the opportunity to assist in making policy changes for the care of bipolar patients who were at high risk for committing suicide. Participation in the initiation of the use of the Zostavax vaccine using evidence-based practice, and the development of the policies and templates for documentation, and collaborating with informatics enhanced my skills as a professional as well as a project developer.

In the leadership, advance nurse practice, and nurse scholar role, improving patient outcomes and safety poses many challenges. Yet, ethical challenges are among the most profound. They include the ethical obligation to make reasonable decisions to prevent errors and injury to patients, the need to respond appropriately when things go wrong, to discover new methods to prevent recurrence, to use transparency when dealing with patients when things go wrong, and to take responsibility to ensure a safe, competent environment for all of our colleagues.

During the practicum experience, I participated in a root cause analysis committee, which gave me the opportunity to develop a successful evidence-based project to improve patient outcomes. I also had the opportunity to establish interprofessional relationships with team members and operate as the team leader and change agent enhanced professional leadership skills on an advanced practice nurse level.

Prior to beginning the practicums, I was very frightened when asked to present and articulate evidence-based practice into the clinical setting. My confidence level has increased, and I am frequently solicited to attend meetings to discuss ways to improve processes in the practicum setting. I have become a member of the American Nurses Association (ANA) and the Georgia Nurses Association (GNA) and have been active in the promotion of policy change in the community and inside the organization. The DNP project I am completing will be utilized throughout the organization, and I was given a certificate of appreciation for my practicum experience and evidence discussed during the influenza season.

As Project Developer.

During the project development phase of the process, the skills of translating evidence into practice were obtained. The literature process was extensive and the information retrieved was utilized in development of the DNP proposal. As a DNP prepared nurse, identifying problems, developing proposals, implementing, and evaluating evidence-based practice to improve patient outcomes in the outpatient primary care setting, has been a rewarding experience. Determining which path to use to disseminate outcomes related to identifying barriers to veteran influenza vaccinations, was mainly based on the targeted audience, which were veterans between the ages of 18 and 65 years of age. Dissemination through posters and publications was identified as being appropriate avenues to translate the knowledge into practice.

Conclusion

In conclusion, by identifying the barriers to influenza vaccination in veterans and developing an educational tool to demystify the vaccination barriers, an opportunity to improve veteran outcomes against increased hospitalizations for influenza related diseases. The barriers identified included inconvenience, insufficient time, perceived ineffectiveness of vaccine, medical contraindication, fear of vaccine side effects, fear of contracting influenza, reliance on home remedies, fear of needles, and avoidance of medications. These barriers and how to best overcome them warrant further research. DNP nurses can use different strategies to overcome these barriers, which will assist them in improved veteran health outcomes and safety.

Recommended involving other healthcare professionals in the campaign such as the environmental staff, infection control staff, senior medical staff and nurse executives as role models, and improving access by making provisions. The Essentials of Doctoral Education for Advanced Nursing Practice identifies many benefits of the practice focused DNP program (AACN, 2006).

Section 5: Scholarly Product

Section 5 is shared with the greater scholarly community. Examples of suitable documents include manuscript for publication, project summary and evaluation report, grant proposal, and program evaluation report. The approach for dissemination was to present a *Did You Know* poster to the organization during the evidence-based practice and research poster fair held twice a year. The top posters are selected for presentation at multiple outside venues during the year such as Emory University and Kennesaw State University. A limitation to using a poster presentation is the inability to reach the masses.

Another way to disseminate the findings, discussion, and implications is by publication in peer-reviewed journals. Providers in larger organizations, such as VA hospitals and community hospitals, reported relying mainly on peer reviewed journals than those in community clinics (Ousley et al., 2010). Peer-reviewed journals are published with the best knowledge currently available in a particular field of practice. Experts in the field review the information prior to being published.

After reviewing the article by Walsh (2010), the DNP prepared nurse role as a scholar and nurse leader can play an integral part in utilizing the Poster Evaluation Rubric for Evidence-Based Practice (PER-EBP) to promote better dissemination of evidence though improved poster development. A poster presentation should presented in a format that the innovations for practice can be reproduced or applied in other settings. The DNP nurse promotes leadership by becoming a change agent in areas of practice such as the evidence-based practice arena improving ways for knowledge to be disseminated accurately (Walsh, 2010).

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