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Impact of Smoking Cessation Education on Workplace Wellness

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Walden University

College of Health Sciences

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Monica Coles

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Walden University
2019

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Abstract

Impact of Smoking Cessation Education on Workplace Wellness

by

Monica D. Coles

MS, Liberty University, 2011

BS, Liberty University, 2007

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

February 2019

Abstract

Guidelines and laws prohibit smoking in public places, and evidence supports the safety and effectiveness of workplace wellness programs in promoting healthy environments. A long-term care (LTC) facility selected as the focus for this project does not offer wellness programs and does not restrict on-site smoking by employees. The purpose of this project was to construct an evidence-based smoking cessation education program for delivery to employees at the LTC facility. The practice-focused question addressed whether a workplace wellness smoking cessation education program would increase employees' knowledge of the harmful effects of smoking and promote engagement in smoking cessation strategies. A pretest and posttest to assess knowledge of the harmful effects of smoking was designed to be administered to employees prior to and after the education program. A panel of 6 experts consisting of 4 clinical nurse specialists, a nurse educator, and a nurse researcher was selected to assess the potential effectiveness of the education program. A 10-question survey was used to obtain the panel experts' evaluation of the program. Descriptive statistics were then used to analyze the results. Nearly all of the experts surveyed reported that they would recommend the education program to a friend or colleague, with 66% selecting "very likely." This is indicative of the potential for the program to be effective. Findings might support social change at the selected facility by increasing staff knowledge of the harmful effects of smoking and staff commitment to participating in a smoking cessation program.

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Dedication

The project is dedicated to my family for standing by my side with love, understanding, and a little “push” during those times when I did not feel like it, for understanding the importance of education and my ambition to attain the highest level of the nursing profession and for inspiration to continue. I would also like to thank the patients I serve who helped me comprehend why.

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Section 1: Nature of the Project

Smoking is one of the major causes of preventable deaths worldwide. About one million people across the world die each year because of smoking (National Conference of State Legislatures, 2012). By 2020, more than 8 million deaths will be caused by smoking (National Conference of State Legislatures, 2012). Management of diseases caused by smoking is costly. Combating smoking is an important measure to save lives and reduce costs. Although the impact of smoking is well established, the long-term effects and cost related to smoking are often ignored. Smoking leads to large losses in productivity as smokers take informal breaks during work time and work inefficiently. The workplace is an ideal setting to combat smoking because 75% of current smokers are working, and some wish to quit (The Centers for Disease Control and Prevention, CDC, 2017). Smokers who are working rely on assistance from their colleagues in the workplace with coverage for patient care while they take breaks (American Public Health Association, 2012). Banning smoking in the workplace will emphasize the company's position on health advancement, disease prevention, and increased patient satisfaction, (Human resources director, personal communication).

For this project, the local problem was unrestricted smoking. Smoking is allowed in the LTC facility where both staff and patients smoke. This issue induces staffing challenges (i.e. frequent breaks for the purpose of smoking), which results in a limited number of staff remaining on the units to care for patients and creates a delay in call bell response time. This in turn decreases patient satisfaction. Smoking cessation will be advantageous for promoting healthy behaviors in the staff and residents. Other potential

benefits of the project include increased productivity, decreased absenteeism, and reduction in health care costs. The Centers for Disease Control and Prevention (CDC, 2017) purports that organizations spend \$1,300 more annually on health care benefits for employees who smoke than on those who do not; however, by offering smoking cessation, organizations can recoup some of these funds as insurance companies usually offer reduced premiums and assist their employees with attaining healthy lifestyles. The objective of implementing this program in the workplace is to modify health beliefs, encourage healthy habits, and aid the provision of high-quality care.

In the United States, about one out of five deaths is caused by workplace smoking. This is equivalent to 443,000 deaths, 49,000 of which are said to be directly tied to secondhand smoke (CDC, 2016). The decrease in workplace revenue due to smoking amounts to about \$4.6 billion dollars and an extra \$96.8 billion in loss of productivity annually (CDC, 2016). Implementing this program may promote a more reliable and productive workforce and minimize disease processes that can result in death.

This Doctor of Nursing Practice (DNP) project was conducted in a short- and long-term-stay nursing facility. The aim was to provide staff education about smoking cessation with the goal of developing a workplace smoking cessation program. According to Baicker, Cutler, and Song (2010), the development of any kind of wellness program will need comprehensive customization with respect to the population being assisted so that complexity and differences among health_care systems can be handled. A reduction in health_care expenditures and the cost of sick leave as well as increased productivity

could be side effects of the program and serve as key outcomes for monitoring success within this particular workplace setting.

The social change implications of implementing a workplace smoking cessation program include the ability of the program to enable staff to have awareness of the effects of smoking as it correlates not only to their health but also the health of those who may experience exposure to their smoking habit on a daily basis. In addition, the workplace smoking cessation program may minimize absenteeism, enhance patient satisfaction, and increase productivity. The target population will acquire knowledge that will boost awareness and modify attitudes about smoking cessation in health care centers, and the program will promote health habits in workers who can then better support their counterparts to do likewise (Zaccagnini & White, 2011).

Workers who smoke are often away from their work areas as they take frequent breaks, thereby minimizing customer satisfaction and productivity, (Rouse, 2010). Employees who smoke are vulnerable to health risks related to smoking. Using the appropriate approach and technique, I conducted this DNP project with the intention of developing and delivering a smoking cessation education program in this LTC setting.

Problem Statement

The facility selected for this project sanctions unrestricted smoking by employees and patients. At the moment, the facility does not have any workplace wellness programs; however, occupational health is forming an interdisciplinary team to begin the process of establishing one. The occupational health nurse informed me that there are many employees at the facility who may practice poor health habits such as smoking which is

attributed to absenteeism (occupational health nurse, personal communication, November 11, 2015). This circumstance coupled with increasing health care costs is an excellent reason for creating a workplace wellness program promoting smoking cessation (National Conference of State Legislatures, 2012).

Problem Significance

Smoking among workers and residents in the chosen setting is challenging because it equates with unhealthy lifestyles. Although smoking is practiced outside of the facility, those who do not smoke are unprotected from the effects of smoking because they have to enter the building through the designated smoking area. Smoking in the workplace affects productivity as those workers who smoke take frequent breaks to do so, which violates the break policy and leaves patients waiting for care.

Purpose Statement

The purpose of this project was to investigate and create an evidence-based smoking cessation education program to promote employee health, reduce health care cost, reduce absenteeism, and increase patient satisfaction. I recognized the following unsafe health practices in my specialty area of long-term care: Staff and patients are allowed to smoke on the premises. I designed the education program to determine the staff's knowledge about cigarettes and the harmful effects of smoking using a pretest. The same test will be used after the education program to measure increased knowledge about cigarettes and the harmful effects of smoking. The smoking cessation educational program was evaluated by a panel of experts and deemed appropriate for dissemination by the organizational leaders. The organization can use the results of the project to

determine staff readiness to quit smoking, implement a smoking cessation wellness program, and measure its effectiveness by monitoring health maintenance, reduced health care cost, reduced absenteeism, increased productivity, and increased patient satisfaction.

Guiding Practice-Focused Question

In the project site facility, there was a need to implement a sustainable wellness program with an aim of advancing health care and modifying unhealthy behaviors. The following question was used to guide the project: Can a workplace wellness smoking cessation education program be developed for the staff in a LTC facility where smoking is allowed in order to encourage them to quit smoking?

Gaps in Practice

The vice president of human resources at the facility advised that a possible reason for opposition to implementing a smoking cessation program within the facility was organizational fear. She elaborated on this statement by saying the potential impact of initiating such a program may cause for alarm and may have a negative impact on staffing by forcing employees to resign. She believed that employees would seek employment elsewhere if their ability to smoke was stopped, and this would place patient care in jeopardy. There is a large number of employees who smoke (human resources director, personal communication, November 11, 2015). I countered this concern by noting that if employees practice healthy behaviors, they will be in a better position to advocate for healthy behaviors in their respective patient population. I provided statistics related to reduced organizational health care costs once wellness programs were implemented. These programs promote healthy habits in employees, which in turn reduce

absenteeism, reduce health care cost, and increase patient satisfaction. As a result, a wellness program was endorsed because of the proven value to patients, employees, and the organization.

According to Baicker et al. (2010), smokers consume at least two hours of break time during the course of their workday, an equivalent of 120 hours in lost productivity per year. Larger organizations (those with 200 or more workers) and smaller organizations (those with fewer than 200 workers) offer employees some type of wellness benefit, according to the 2012 Kaiser Family Foundation and Health Research and Education Trust's annual survey of employer health benefits. This means that the facility should consider implementing a smoking cessation program. A wellness program focused on smoking cessation will enable the facility to leverage health benefits costs.

There are many reasons why people start smoking, and once they do it becomes both physically and mentally addictive. Smoking poses detrimental effects to smokers and those who do not smoke, U.S. Department of Health and Human Services, (2010). Many states and municipal areas have enacted tobacco-free and smoke-free laws and banned public smoking in certain establishments to protect those who do not smoke.

Governmental agencies have been encouraging businesses to implement non-smoking policies to protect their employees. Because nurses are tasked with health promotion and disease prevention, this project was needed encourage staff to practice healthy lifestyles that are conducive to promoting health reducing health care costs.

Potential to Address Gaps in Practice

By delivering resources and information to employees so they may comprehend this particular wellness program education, employers will be the key benefactors. Their participation will minimize expenditures for employees' health care. The facility's human resources department expressed concern that there would be staff turnover related to such an intervention; however, other facilities in the area are smoke free; therefore, unless employees who smoke desire a career change, their options are to quit smoking, take extended lunch breaks off site and face disciplinary action, or use nicotine replacement therapy while on duty. In addition, most staff have seniority with above-average compensation. To seek employment elsewhere to have the ability to smoke might not be financially beneficial. Another factor is preexisting conditions and having to wait for insurance. As Baicker et al. (2010) noted, the organization in which a person works plays a role in disease prevention and health promotion. Implementing a workplace wellness program to help workers with smoking cessation will improve their health and minimize their health care expenditures (Kendzor et al., 2015).

Nature of Doctoral Project

This scholarly project supported disease prevention and health promotion not only for employees but also for the patients for whom they offer health care. By making changes in the workplace environment and offering resources for workers to change unhealthy habits, this project will create a healthier and safer workplace for all people using the facility (see Henke, Goetzel, McHugh, & Isaac, 2011). I will use a pretest and posttest to determine the knowledge base of employees and the efficacy of the education

program as it relates to increasing knowledge of the harmful effects of smoking. The evidence obtained from the literature review was used to construct the pretest and posttest and design the smoking cessation education program. I will collaborate with management at the facility to schedule town hall meetings for staff as this method has been beneficial to capturing the largest audience for the purpose of disseminating information. These meetings will occur on four different days at times designated to capture three shifts. The education program was evaluated by a panel of experts, and feedback was used to modify the program prior to delivery to the organization for review and implementation. The program was designed to provide resources to aide employees in their endeavors to quit smoking, educate those living with diseases caused by smoking, and assist employees in adopting healthier lifestyles. Evaluation of the program will occur through organizational reports of project implementation as it pertains to the reduction of health care costs, absenteeism, and turnover as well as increased productivity and patient satisfaction.

Significance of the Project

The project addressed the existing health care practice of employees smoking at the site facility. I reviewed the literature to construct a staff education program to promote workplace wellness. The education program, including the pretest and posttest, was based on existing evidence and was vetted by a panel of experts for appropriateness and applicability to the subject. The education program was the main source of data collection. The purpose of the program was to assess the educational needs of the staff related to the harmful effects of smoking. Findings will be presented to facility administrators for project review and implementation of the program.

The health care delivery system is trying to adopt disease prevention through health promotion. Health facilities can enhance awareness of healthy habits by enacting programs such as the one designed in this project to change risky behaviors and facilitate healthy lifestyles. It is a DNP student's responsibility to ensure that evidence-based projects are representative of real problems and to change habits and processes while promoting health and sustainability. This project was significant in the following ways:

- Employees who participate will experience reduced absences due to illnesses caused by smoking.
- The organization will experience a reduction in health care cost and absenteeism as well as increased productivity and patient satisfaction.
- Patients will have healthier employees caring for them who will serve as role models to help them quit smoking.
- Human resources will observe a reduction in staff turnover due to FMLA and terminations due to violation of the absenteeism policy.

Summary

The smoking cessation education project focused on staff education in the workplace. The organization may use the findings to implement a workplace wellness program to modify health behaviors and promote high-quality care through smoking cessation. I used an LTC facility as a case study to promote healthy behaviors in staff and residents. Because of the adverse effects of smoking on productivity and workplace wellness, the implementation of a workplace smoking cessation education program is worthwhile in terms of social, economic, and health gains. This initial chapter presented

the nature of the project, the problem statement, the purpose statement, the practice-focused question, and the project significance. Section 2 contains a comprehensive literature review, including theories and models, relevance of the project to nursing practice, and my role in the project.

Section 2: Literature Review

This section includes a comprehensive literature review to support facts and arguments for this project addressing the problem of smoking in the workplace. I highlight the model used to frame the practice-focused question, describe the project's relevance to nursing practice, provide relevant background for the project, and explain my role in the study. The literature review includes information related to smoking cessation in the workplace with successful program implementation in long-term and acute-care settings. I evaluate the current literature and synthesize the information on smoking cessation in the workplace.

An electronic database search was performed using databases in the Walden University library: Medline, Pub Med, CINAHL, Science Direct, EBSCO host, and the Cochrane Library. I also searched organizational websites related to the study. Overall 37,883 articles were identified. After duplicates were removed, I screened titles and abstracts for eligibility according to the following key words: *harmful effects of smoking, quit smoking, stop smoking, smoking cessation, workplace wellness programs, wellness, wellness programs, tobacco cessation, stop smoking tips, and pharmacological and non-pharmacological interventions for assistance with smoking cessation*. The articles chosen were limited to those published between 2010 and 2017 and written in English. The remaining 1,862 full-text articles on smoking cessation wellness programs were assessed for eligibility. Eligible studies were those in which researchers measured smoking cessation wellness education programs as they related to behavior changes in the workplace, reduction of health care costs, absenteeism and turnover, increased

productivity, and patient satisfaction. Twenty nine articles were included in the final review. According to these sources, cessation programs contributed substantial benefits to employers and employees. Cessation programs included smoking cessation groups, self-help manuals, seminars, Internet services, and telephone counseling services.

Recent literature on smoking cessation programs and workplaces that have implemented these programs was limited. The U.S. Department of Health and Human Services (2015) estimated that in 2014, about 55% of private sector employers adopted a smoking cessation program, and in 2015, 80% of U.S. workplaces had some type of smoke-free policy such as established smoking zones. There was also limited information on the types of workplaces that implement smoking cessation programs.

Workplace wellness programs have focused on improving health and modifying health behaviors. Following the implementation of health care reform in 2013, U.S. companies had the option to offer employee health care benefits or have their employees obtain their own personal health insurance in health care exchanges (Carroll, Rick, Leaviss, Fishwick, & Booth, 2013). The health of employees and employee engagement were promoted by this reform. One study showed that most employers identify weak employee engagement as the major barrier to changing workers' health-related behaviors (Gochman, 2013). Addressing this challenge is significant. In the United States, over two thirds of employers consider employees' poor health habits the primary obstacle to providing their worker's with affordable health care coverage (Hersen & Sturme, 2013).

Smoking affects facilities and organizations in terms of decreased productivity, which influences the delivery of services to residents. By contributing to diseases and

premature deaths, poor health behaviors lead to economic and emotional consequences for employers, employees, and residents, (Gochman, 2013). Wellness programs provide employees with useful tools to reverse their health behaviors and increase their engagement in their health and well-being (American Heart Association, 2013). The programs integrate behavioral economics with overall health and positively influence behaviors that might otherwise be self-defeating, (Gochman, 2013). According to Health Canada (2010), the only feasible way to improve employee health and enhance health behaviors is to implement an effective health wellness program that engages employees and supports them in advancing their health.

In addition to lost time caused by illnesses, smokers are also less productive on the job. Implementing workplace smoking cessation education within the LTC facility may enhance employee productivity, employee attendance, and resident satisfaction. This program may minimize absenteeism, enhance patient satisfaction, and increase productivity. Smoking in the workplace affects productivity; for example, workers who smoke violate the break policy, which results in resident displeasure and is regarded as an unhealthy behavior (Fletcher, 2014). The LTC facility used in the project has experienced losses due to absenteeism and reduced productivity. According to the U.S. Department of Health and Human Services (2010), smoking has a detrimental impact on the bottom line of organizations and the overall productivity of the U.S. economy. Minimizing smoking and helping employees to quit can foster a more productive and dependable workforce. Smoking cessation programs increase productivity by reducing time spent in smoking breaks and sick days related to smoking. Carroll et al. (2013) showed that cessation

programs in diverse organizations increased productivity by 20% in the first 6 months. Through a smoking cessation education program at the LTC facility, employees may develop a better sense of control over their health habits. This may result in greater employee satisfaction in the workplace and may minimize absenteeism.

Smoking is the key cause of preventable illness, reduced productivity, and increased health costs (Henke, Goetzel, McHugh, & Isaac, 2011). At the LTC site, it may be possible to implement a workplace smoking cessation program because the facility does not currently have such a program. According to the occupational health nurse at this facility, there are numerous employees who practice unhealthy habits, such as smoking. Smoking among workers and residents in this setting is challenging because it is associated with unhealthy lifestyles. This health wellness program will provide the facility with economic, health, and social benefits. By engaging the necessary stakeholders, I will design the best program to suit this workplace. Minimizing levels of smoking among employees will help reduce conditions and illnesses that are key causes of absences due to sickness (Health Canada, 2008).

The effects of smoking are well documented: cardiovascular disease, lung disease/cancer, chronic respiratory symptoms (coughing, the production of phlegm, or shortness of breath), high blood pressure, increased absenteeism, decreased productivity, decreased patient satisfaction, and increased health care cost (CDC, 2010). Workplace smoking poses a risk to smokers and nonsmokers. The U.S. Department of Health and Human Services (2010) found that smoking was the key cause of smoking-related illnesses and preventable death in over one third of health care centers. Employees who

smoke at the project site often experience illnesses that require attention. The American Heart Association (2013) reported that more than 1.1 million annual deaths are associated with smoking, and the cost of health care and lost productivity is more than \$100 billion.

Deaths and lost productivity are also linked to involuntary exposure to the tobacco smoke U.S. Department of Health and Human Services, (2010).

Health Canada (2010) found that simple provision or availability of programs is unlikely to produce change in the health behaviors of employees. As an alternative, incentives can potentially improve participation but are unlikely to influence action or maintenance. Employees' behaviors and attitudes are influenced by subjective priorities and experiences (American Heart Association, 2013). This means that cessation programs should either target employees who have the desire to stop smoking or concentrate on changing beliefs about smoking. In order for them to stop smoking participation in any smoking cessation program only holds significance for the individual employee if they are in a program, or have previously participated in one. Workplace cessation programs should be designed to encourage employees to discontinue smoking (Kendzor et al., 2015). Proper education will assist with this.

In accordance with the findings of this project, an evidence-based approach could be developed; more specifically, the use of workplace-based group behavioral approaches, pharmacological therapy, and individual counseling would be effective, (West & Brown, 2014). As Carroll et al. (2013) noted it is useful to consider the cost effectiveness of any program given the evidence and need for detailed data.

Evidence to Support Smoking Cessation in the Workplace

Workplace health wellness programs exist throughout the world, but they differ with respect to the economic, cultural, and political elements of each workplace and country (Henke et al., 2011). Other differences are attributed to the size of the workplace and whether health services are delivered through employee benefits and insurance packages or through government-sponsored programs (Baicker et al., 2010). A workplace smoking cessation program would have a component of secondary prevention for workers regarded as being at risk because of their way of life. The program would be designed to aid employees in comprehending their health risks related to smoking and adopting behaviors to minimize or alleviate those risks. Workplace smoking cessation programs can include health risk management, behavioral health, psychological and substance abuse counseling, lifestyle management, and primary care promotion (National Conference of State Legislatures, 2012). A smoking cessation program would be designed to minimize costly health care use, including hospitalization, specialist visits, and emergency room visits, and would provide benefits for the organization in the areas of reduction in absenteeism, improvement in productivity, promoting a better quality of life for staff and residents, and increasing patient satisfaction.

Organizations are aware that keeping workers healthy is beneficial for the employees and for the organization's profitability and productivity. Most Americans spend a substantial portion of their time at their workplace (Fishwick et al., 2013). Nevertheless, most employers do not consider how they can construct a healthier workforce or workplace, (Carroll, Rick, Leaviss, Fishwick, & Booth, 2013). Modern

workplaces contribute to ill health because the jobs may lead to stress, physical inactivity, high smoking rates, and other threats to employees' health (National Conference of State Legislatures, 2012). Some workplaces offer prospects for health promotion. Researchers found that when implemented appropriately, workplace health promotion and disease prevention programs can improve the health of workers, minimize health care costs, improve productivity, increase return on investment, and increase patient satisfaction benefiting both employees and employers (Henke et al., 2011).

According to the Kaiser Family Foundation and Health Research and Educational Trust (2012), consideration of workplace health should be an area of concern for employers. This is attributed to positive outcomes that have been presented by researchers in workers' health, performance, and productivity. Employers are motivated to intervene to promote the health of their employees (Gochman, 2013). Organizations will reap the benefits related to enhanced performance and productivity in their workers.

Besides increasing productivity, interventions to enhance health promotion in the workplace can minimize health care costs for workers, which are significant in developed countries such as the United States where health insurance is not paid to employees through their employers (Fishwick et al., 2013). Workplace wellness programs can also be part of a strategy to confront regulations and promote sustainable practices. Quitting smoking is not easy and may require multiple attempts. Those who quit smoking often begin again due to symptoms of withdrawal, weight gain, and stress (National Conference of State Legislatures, 2012). Any cessation program should include information related to coping and impeding a relapse. Henke et al. (2011) asserted that

the consequences of employees' poor health include high medical and disability costs, increased employee turnover and absenteeism, decreased productivity, and high compensation expenses. Furthermore, the poor health of one worker may negatively influence the performance of other workers who work with him or her. Health Canada (2010) argued that workplace health and decreased productivity are influenced by factors in the workplace including employees' health practices, attributes, personal resources, and values. In addition, Canada noted that the physical and psychosocial strategies adopted in the workplace may impact the health of workers. A combination of diverse practices and approaches in the workplace, such as personal health practices, resource allocation, and organization or work practices, can improve employee health and productivity (Canada, 2014).

Theories and Models

Health belief model (HBM) is somehow similar to the social cognitive theory. According to this model, certain behaviors can manifest related to certain influences. These can be either internally or externally, in other words, one's own perceptions regarding their health. This model could assist the employers and health workers to gain insight into some of the significant factors that bring about smoking behaviors (Fletcher, 2014). For instance, the model explores how smokers feel when they are aware of the serious consequences that smoking poses to their health (Fletcher, 2014). Some of those consequences are; their individual susceptibility to disease or debility caused by using tobacco, the thought of tobacco as being problematic versus the reward of quitting, the

cost of treatment, impediments to quitting, and prompts to change their tobacco use behaviors.

The facility can use this model to explore the staff's perceptions about smoking and construct cessation programs with it as the center. Health belief model enables one to know whether smokers have an idea that quitting smoking would reduce their vulnerability to ill health and whether the advantages of implementing a cessation program would be beneficial to assist them with quitting smoking. HBM as a foundation for education will assist smokers to lead healthier lifestyles, thereby reducing healthcare cost for the organization, reduce absenteeism, increase productivity, and increase patient satisfaction (West and Brown, 2014). Just like the social cognitive theory, this model assists one in determining the level of self-efficacy of the probable clients. West and Brown (2014) define efficacy as the degree to which people believe in their own ability to take the suggested measures. These measures involve the need to quit smoking and to sustain that practice permanently. An understanding of this model would be important to the creation of a workplace smoking cessation program. The model permits the design of strategies that consider the client's insights of the issue and enables facilitators to work with their expectations and concerns. Use of this model will help employees better understand how their perceptions of health are false, and help the organization by answering yes to the practice-focused question regarding whether or not smoking cessation education will benefit them.

Relevance of Workplace Smoking Cessation Education to Nursing Practice

Health care professionals witness the consequences of exposure to smoke on people's health. In this case, smoking cessation is an important practice as it is purposed to improve health and prevent diseases (Zaccagnini & White, 2011). People who want to stop smoking can be successful with support and advice from health care professionals and organizations. A study conducted by Hersen & Sturmey (2013) found that support and advice from nurses can increase people's accomplishment of quitting smoking. The key challenge is to integrate smoking cessation interventions and smoking behavior-intensive care as part of standard practice in order to manage all people who smoke regardless of their environments (Health Canada, 2010). Using the data presented in this literature review will assist with implementation of a workplace smoking cessation program at the chosen LTC facility. The probable strategies to be used by the DNP student for this project would be to collaborate with the stakeholders to create a wellness committee, lead the initiative to construct an evidenced-based smoking cessation education program, and share the results with organizational leadership for implementation and dissemination. The rationale behind this strategy relates to the practice gap that the organization is fearful of staff turn-over. A positive factor is that other facilities in the area have already banned smoking for staff and patients including a newly constructed facility. It would be beneficial for this facility to follow their practice.

Workplaces are potential settings for controlled smoking activities, including smoking cessation interventions and policies. The working population spends at least a third of their time at work (CDC, 2017), as such, workplaces can assume the role of

facilitators for healthy behaviors. As Gochman (2013), Coşkun Beyan and Varol (2016), and Digiusto (2010) emphasize, smoking in the workplace affects not only the employees who smoke, but also everyone else in the workplace through second-hand inhalation. In countries, organizations, and facilities where smoking has not been banned, the productivity is low and the costs spent on health are extremely high (Henke, Goetzel, McHugh, and Isaac, 2011).

Constructing and developing a smoke-free environment is a significant aspect of a completely healthy workplace and a means for the DNP student to assist with the advances of nursing practice. Healthy workplace achievement depends upon motivation of the organization, employees, and the size of the workplace and demographics of the employees (Carroll, Rick, Leaviss, Fishwick, and Booth, 2013). The workforce may know the dangers and effects of smoking, but may not be informed of the resources which can help them quit smoking. In most cases and scenarios, the smoking cessation program is aimed to help employees quit smoking and improve their health as well as productivity (Fishwick et al, 2013). A full ban on smoking would be ideal, as many have mandated this intervention; however, in the case of the chosen facility, regulations prevent this from happening. West and Brown (2014) assert that screenings can help employers know whether their employees smoke or not. A component of a smoking cessation program for those employees who are willing to quit would be a support group facilitated by a designee of the organization. According to Health Canada, (2010), it would be significant to administer the smoking cessation program at a convenient time for the target population. This would ensure the physical constraints related to the

program are not discouraging employees or participants from initially embracing it or maintaining their participation. Similarly to Health Canada, (2010), Fishwick et al., (2013) added that it might be significant to encourage and supervise the participants who have expressed interest in the program ensuring that their first experience is inspiring and encouraging. Workplace smoking cessation programs should be facilitated by someone empathetic to the smoking habit (West and Brown, 2014). Such an individual needs to be characteristically a good role model for the organization and an inspirational change agent for all employees.

There is adequate evidence indicating that the best equipped workplace smoking cessation programs have a variety of components, comprising group counseling, pharmaceutical interventions, individual therapy and incentive schemes personalized to the workplace setting. Digiusto, (2010) emphasizes using a particular approach or concentrating on only single smoking cessation tools thereby leading to a detailed and integrated program focused on employee ownership.

While there is ever increasing data regarding the list of diverse interventions that workplaces are adopting, little is understood about the efficiency of educational programs, thus an important aspect at this point is to focus deeply on the literature review relating to the efficiency of smoking cessation education to be delivered in this setting.

Role of the DNP Student

This DNP student does not have any affiliation with the facility being utilized in this project. The facility was utilized for student's practicum experience. I continued my involvement as it related to development of the staff education project about smoking

cessation. The DNP student is a non-smoker, though I did smoke very briefly many years ago. The DNP student is excited to see the impact of her first EBP project. Nursing is the students' passion and to attain at the highest level while effecting change is motivational in and of itself.

The elements of this project are expressly related to four out of the eight DNP Essentials and exhibit numerous skills that meet the obligation for degree achievement. A summary of the Essentials will be presented and all referenced essentials will be explained further in Appendix A, (Zaccagnini & White, 2011). The role of the DNP in this project is to:

1. Essential I - Scientific Underpinning for Practice: Demonstrate the skills to integrate nursing science with biophysical, analytical, and organizational sciences through in-depth literature review and analysis to determine the nature and depth of staff risk for adverse health events, absenteeism, and loss of productivity associated with smoking in the workplace (see Appendix).
2. Essential II – Demonstrate organizational and systems leadership for quality improvement and systems thinking: This project provides the opportunity to improve patient and staff outcomes and foster smoking cessation. This project affords this DNP student the opportunity to evaluate the cost effectiveness of developing a smoking cessation program in order to promote healthy lifestyles in the staff that will in turn advocate for and educate their patients to do the same. Through the evaluation of existing programs student will adapt interventions for the long term care setting (see Appendix).

3. Essential III – Apply clinical scholarship and analytical methods for Evidence-Based Practice: The DNP competencies are demonstrated through this project that is being designed within the confines of performance improvement methodologies, including critical appraisal of the literature, design and implementation of change, predicting or evaluating the outcomes, and finally disseminating practice improvement findings (see Appendix A).
4. Essential VI – Demonstrate interprofessional collaboration for improving patient and population health outcomes: This project requires collaboration with Human Resources and the employee group health insurance carrier in order to reduce the gaps that may exist, namely organizational fear and to determine the level of assistance if any that can be expected related to the use of medications or therapies to assist with smoking cessation (see Appendix A).

Summary

This projects focus is to increase knowledge related to the harmful effects of smoking. This will be beneficial to the workplace by assisting with the modification of health behaviors namely smoking cessation. The project is set in a LTC facility where staff and patients are allowed to smoke in a designated area. The area is adjacent to the building whereby employees who do not smoke are subjected to secondhand smoke as they enter the workplace. In addition, the smoke enters the building.

Because of the adverse effects of smoking on productivity and workplace wellness, the implementation of a workplace smoking cessation program is worthwhile in

terms of social, economic and health gains (Farrelly, Evans, and Sfekas, 2011). The impact of implementing a workplace smoking cessation education program includes designing a program that will enable staff to have awareness of the substances contained in cigarettes, the harmful effects of smoking to their health and the health of those who may be subjected to the by-product of their smoking (Farrelly, Evans, and Sfekas, 2011). A workplace smoking cessation program will minimize absenteeism, enhance patient satisfaction and increase productivity (Rouse, 2010). The target population will acquire knowledge that will boost awareness and modify attitudes about smoking cessation in health care centers. The program will promote health habits in workers who can then better support their coworkers to do likewise (American Heart Association, 2013, Rouse, 2010).

The types of cessation programs for quitting smoking as evaluated in various studies (Carroll, et al., 2013) include: self-help- “quitting cold turkey”, cessation groups, individual counseling, nicotine replacement therapies , i.e.(gum, patches, lozenges, inhaler and nasal spray), non-nicotine pharmacy support, i.e. Chantix & Wellbutrin, phone apps, internet support, telephone based support (1-800-QUIT NOW), incentives and comprehensive interventions. These programs have been successful because they lay a foundation for quitting that teaches coping mechanisms, management of stress, and management of weight through exercising, quitting benefits, and prevention of relapse (Health Canada, 2010, Fletcher, 2014). The findings from these reviews designate that group behavioral interventions, pharmacological therapy and individual counseling are all effective in accomplishing smoking cessation.

This section has concentrated on the literature review for the project, the model used to guide the project, the relevance the project may have on nursing practice and the role of the DNP student in the project. Section 3 will focus on the practice focused question and describe the education to be evaluated by the panel of experts.

Section 3: Collection and Analysis of Evidence

Smoking at the chosen LTC facility was the problem of focus for this project because smoking was related to decreased productivity, decreased patient satisfaction, increased absenteeism, and increased health care cost. This problem prompted me to design a smoking cessation education program for the facility. Because of possible deterrents to the program, I decided that staff education about smoking cessation would be the most effective approach. This section includes the practice-focused question and provides a description of the smoking cessation education program that evaluated by a panel of experts. The number of employees who smoke at the facility and the length of time they have been allowed to smoke (human resources director, personal communication, November 11, 2015) suggested that the program could have a negative impact on staffing and that staff would leave their positions if they were mandated not to smoke on campus. A significant reduction in staff could possibly jeopardize patient care and safety. This was the first gap in practice. Another gap in practice was that patients in the facility also smoke. Although it is a privilege that can be restricted, long-term care regulations frown upon practice changes such as banning smoking in facilities where residents are currently allowed to do so.

Practice-Focused Question

In this particular nursing facility, identification of the smoking problem led to the practice-focused question. To implement a sustainable wellness program to improve health care and modify unhealthy behaviors, I designed the following practice-focused question to guide the project: Can a workplace wellness smoking cessation education

program be developed for the staff in a LTC facility where the staff and patients are allowed to smoke in order to encourage them to quit smoking?

Sources of Evidence, Analysis, and Synthesis

This project site is an established nursing facility located on the East Coast of the United States. The facility contains over 300 beds with more than 650 workers, 156 of which are confirmed smokers. This facility relocated over 100 of its beds to a newly constructed smoke-free facility to bring it in line with future plans and organizational goals. At the time of the project, the facility did not have any workplace wellness programs; however, a team of stakeholders was formed within the organization to review the results of this project and make plans for implementation.

Peer review is the process in which recognized experts make judgments about the merits of a study. I chose a panel of 6 experts: 4 clinical nurse specialists, 1 nursing educator, and 1 nursing researcher. These experts were chosen to evaluate the education program for use in the project.

Smoking Cessation Education

The employee education presentation would be held with the aid of department managers. Having manager support would be important for managing scheduling conflicts to obtain the largest audience possible. The education would be delivered during mandatory town hall meetings. It would consist of a 7-item pretest and posttest (see Appendix B). The staff would be given the pretest to assess their knowledge of smoking and its harmful effects. They would then receive the smoking cessation education followed by the posttest to assess the efficacy of the education. The education program

consists of a 16-slide PowerPoint (see Appendix C) including the definition of smoking cessation and facts and statistics related to smoking. Consequences of smoking and the harmful effects on the body are also included. References are made to smoking's impact on the workplace environment, staff productivity, and patient satisfaction. The education also includes a time line that indicates what happens to the body from 20 minutes after quitting up to 10 years, such as improvement in circulation and reduction in heart rate and blood pressure. The PowerPoint also includes types of available assistance (i.e., counseling, nicotine replacement therapy) and information on stress management, exercise and weight management, benefits of quitting, and prevention of relapse as well as information on how the smoking cessation program would be paid for. The PowerPoint includes the chemical components of cigarettes and images of healthy lungs and smoke-damaged lungs. These methods were chosen because they were appropriate for all education levels, could increase staff knowledge of the harmful effects of smoking, and could indicate receptiveness of staff to smoking cessation assistance. Visuals were added to enhance understanding and engagement of the staff.

Education Review and Survey Results

The responses to pretests and posttests would be compared after the education session to assess the efficacy of the program. A 10-question survey containing 5-point Likert scale responses (see Appendix D) would be used to assess staff's knowledge, beliefs, attitudes, behaviors, and opinions related to smoking cessation. I asked each panel expert to review the education program and take the associated survey, which was submitted anonymously to Qualtrics online survey platform. The experts were asked

whether they would recommend the education program to a friend or colleague, how relevant the education was to the topic, the clarity of the information presented, whether the information provided was too much or too little, how engaging the information was, whether the presenter was knowledgeable about the topic, whether there were clear takeaways, whether they would quit smoking after having received the education, and what their knowledge of the topic was. A question at the end of the survey allowed the panel to provide additional comments.

Once the education review and survey were completed, the results were transferred to an Excel spreadsheet for analysis using descriptive statistics. Several of the panel members were highly opinionated and provided useful information on how to improve the education program to have the best impact. The panel of six experts was chosen based on their nursing experience and evidence-based practice background to review and comment on the education program. The panel consisted of six nurses, including four clinical nurse specialists who develop and deliver education to nurses and patients. One of the panelists was a nursing educator and the other was a nursing researcher who serves as faculty at several institutions of higher learning and oversees nursing research within a large teaching Magnet facility.

Summary

Section 3 included the practice-focused question, sources of evidence, and methods for analysis and synthesis. Section 4 focuses on the findings and implications based on the expert panelists' recommendations for improving the education program and the strengths and limitations of the project.

Section 4: Findings, Implications & Recommendations

The chosen LTC facility allows its employees and patients to smoke on the premises in an era when smoking bans exist in most organizations in the United States. While smoking is not allowed in the facility, the smoking area is adjacent to the building necessitating employees enter through that area in order to gain access to the building. Some facilities forbid smoking on site, meaning employees can't smoke in the parking lot or in their cars. While others have employees go off site to public areas and require them to clock out to do so. This is problematic for those who smoke as well as those who are exposed to that smoke. In addition to adverse health events, absenteeism, and productivity, LTC administrators fear that if a smoking ban is implemented, the workforce will be further depleted because staff will leave if they are not allowed to smoke. In addition, regulations exist that delineate what the facility can and cannot do about the current patient populations who smoke.

The practice-focused question addressed in this project was the following: Can a workplace wellness smoking cessation education program be developed for the staff in a LTC facility where the staff and patients are allowed to smoke in order to encourage them to quit? The goal of this project was for the facility to implement an effective smoking cessation education program that will effect change and have a positive impact on workplace wellness. This goal was achieved.

According to studies reviewed in this project, health care cost would be minimized if current smokers quit. In addition, productivity and patient satisfaction would increase and the organization would be aligned with other smoke-free facilities.

Smoking cessation education programs lead to cost savings attributable to lower absenteeism rates, increased productivity, and patient satisfaction (Henke et al., 2011). One implication of implementing a wellness education program is to foster employee health. Because values are fundamental in predicting and understanding human behavior, health awareness on smoking is significant to compel change. Operative health promotion programs designed to modify negative behaviors while strengthening positive behaviors must recognize that the behavior and attitudes of the target population are appropriate (Gochman, 2013). This section presents the findings from the evaluation performed of the education program to provide the chosen facility with viable recommendations regarding workplace smoking cessation. A 10-question survey was used to obtain the panel experts' evaluation of the program. The surveys were completed anonymously in the Qualtrics online survey platform.

Findings and Implications

The table below illustrates the expert panel's evaluation of the proposed smoking cessation education.

Table 1

Summary of Expert Panel Evaluation

How likely is it that you would recommend this education to a friend or colleague?	How relevant is the material to the topic?	How do you feel about the amount of information presented?	How engaging was the material?	How would you rate the presenter's knowledge about the harmful effects of smoking?	How clear are you on the takeaways from the education?	How likely would you be to quit smoking after completing this education?	How much knowledge did you have previously about the alternatives available to help with quitting smoking?
Likely	Clear	Somewhat too little information	Not very engaging	Excellent	Very clear	Extremely unlikely	A great deal
Very likely	Clear	Somewhat too little information	Not very engaging	Excellent	Clear	Slightly unlikely	A great deal
Extremely likely	Very clear	Right amount of information	Extremely engaging	Very good	Very clear	Highly likely	A lot
Extremely likely	Clear	Right amount of information	Engaging	Good	Clear	Likely	A lot
Very likely	Very clear	Right amount of information	Engaging	Very good	Very clear	Likely	A lot
Extremely likely	Extremely clear	Right amount of information	Very engaging	Excellent	Extremely clear	Highly likely	A lot

Nearly all of the experts surveyed reported that they would recommend the education program to a friend or colleague, with 66% selecting “very likely.” This is indicative of the potential for the program to be effective. The relevance of the material and the presenter’s knowledge were the strongest attributes of the program. Both seemed to be linked as the experts who scored the program high on relevance also gave the presenter’s knowledge a high score. The presenter’s knowledge did not appear to be an important attribute of an effective program, as 33% of the experts who rated the presenter’s knowledge as “excellent” were unlikely to recommend the program.

Clarity was not rated as high as relevance and presenter’s knowledge (50% clear, 30% very clear, and 10% extremely clear). Experts who reported lower clarity ratings were also less likely to recommend the program. One expert commented that the content of the program may not be easily understood or may not seem relevant to the target audience, and suggested removing complicated or academic terms unless the targeted audience was management. This expert recommended providing real-world examples such as cost comparisons to current smoking habits, and sharing additional resources for help and support with quitting smoking:

The education level of the presentation may not align with the target audience, especially if those who have less than a high school diploma are part of the audience. Usage of such words as “consequences,” “composition,” “contamination,” etc. may be unnecessarily complex. Consider adding to the presentation information about the number of attempts required before someone can successfully stop smoking. It is important that the learner understand the

process of smoking cessation so that they are not discouraged when they fail on first, second, third and subsequent attempts.

The amount of information presented and level of engagement perceived were the greatest opportunities for improvement. Sixty-six percent of the experts reported that the program includes the right amount of information, but the remaining 33% felt the program included too little information. These same experts rated the program as “not very engaging.” The amount and quality of information appeared to be important attributes in evaluation, especially to experts who rated their own knowledge as very high, as these experts were unlikely to recommend the program.

In accordance with the findings of this project and after the recommended modifications to the planned education were made, an evidence-based approach to smoking cessation was developed in the facility. Workplace-based group behavioral approaches, pharmacological therapy, and individual counseling were strongly recommended. As Carroll et al. (2013) noted, it is useful to consider the cost effectiveness of any program,

Workplace smoking cessation programs are among the best means for employers to advance employee health. At the time of the project, the chosen facility did not have any workplace wellness programs. According to the occupational health nurse at this facility, several employees at this facility practice unhealthy habits such as smoking. In addition, the facility has experienced losses due to absenteeism and reduced productivity, and patient satisfaction scores related to wait times are in need of improvement. To achieve a smoke-free workplace environment, greater efforts to aid smokers to quit are

necessary (Fletcher, 2014). Once the results from the DNP project have been delivered, it will be beneficial for the organization to move forward with implementation to promote a healthy work environment.

I used the recommendations from the expert panel to improve the education program addressing the harmful effects of smoking and providing information on smoking cessation therapy and assistance with quitting. The goal was to educate the staff about the harmful effects of smoking while promoting the benefits of quitting. On the effectiveness of comprehensive educational programs, the research evidence was mixed. This may be due to differences in program information, making evaluation of the programs difficult. In addition, workplace smoking bans also seem to be partially effective. There was evidence that smoking bans could be effective in minimizing smoking rates during working hours; however, there was contrasting evidence about whether these prohibitions minimized the overall smoking behavior (Kendzor et al., 2015). Interventions that focused on health behaviors, such as pharmacological interventions and individual counseling, seemed to have comparable results within or outside the workplace. Even though the workplace should provide access to wellness programs, evidence that a smoking cessation education program would be effective does not exist at this facility. Therefore, the timing is optimal to introduce this approach. The available evidence shows limited data concerning cost effectiveness of workplace smoking cessation programs (Horwitz et al., 2013).

A workplace smoking cessation program would be well received if the employees were ready to quit. Findings from previous studies (Coşkun-Beyan and Varol, 2016)

raised key questions about how workers decide to be involved in smoking cessation programs, why some of the predicted impacts of a workplace smoking cessation program are not as significant as first thought, and why participation in workplace wellness programs is generally low. Workplace programs that are designed to assist smokers would only be successful if employees are prepared to make a behavioral change. If employees are not ready to change, even an appropriate intervention is likely to have no effect. The evidence indicated that workplace smoking cessation programs should either target smokers who desire to quit or concentrate on modifying their behavior and attitudes (Gochman, 2013).

A smoking cessation education program should address the target audience and deliver the intended message. At the chosen LTC facility, there are many staff members who smoke, and the facility does not have any wellness programs to assist with or encourage cessation. Most staff has less than a ninth-grade education, and only a few have professional education beyond high school (i.e., licensed practical nurse and registered nurse). In addition, the diverse population includes employees who do not speak fluent English. Any educational program must be designed with the target audience in mind to promote engagement and staff satisfaction with the end result. Therefore, I chose a panel of six experts to evaluate the smoking cessation program for the chosen LTC facility. A 10-question Likert scale survey was used for this evaluation.

Recommendations

The expert panel made the following recommendations for modification of the education:

1. There needs to be a clearer explanation of thirdhand smoke differentiating it from secondhand smoke.
2. Use information from the CDC, specifically the 2017 “Quitting Smoking in Adults” report.
3. Add information on previous cessation programs, including methods of access and success rates.

One expert suggested the following:

While the presentation lists five types of smoking cessation programs, there is no detail as to how to access these opportunities. This is the most important part of the presentation—once you hook them with why they should quit, be sure to provide enough guidance.

Several of the experts suggested including more images and increasing the font size to help make the program more engaging:

I find the slides are difficult to read and do not sustain my attention. There is a lot of information on some slides. The 9-point font together with the slide color choice on some slides was especially difficult to read. Integration of meaningful graphics throughout would strengthen interest and offer visual relief.

Strengths and Limitations of the Project

Smoking cessation programs are recognized as a clinical practice that improves overall health and saves costs. Smoking cessation programs have been used to enhance workplace productivity. An additional strength of this project is that cessation programs are nationally recommended and can be easily adopted (Farrelly, Evans, and Sfekas,

2011). The adaptability of this program makes it easy to implement. The expert panelists who evaluated the education program as “highly recommendable” supported the strength and sustainability of the program. Because time constraints are a concern in nursing practice, the most important strength of this project is that it can be completed in a short period of time. The program can be effectively implemented in this setting to improve employee health, reduce health expenditures, and increase patient satisfaction.

Weaknesses of this project include the limited ability to assess its adoption and utilization. There is no consistently employed tool to evaluate the utilization of workplace smoking cessation programs, and there is no guarantee that the organization will be mindful of the impact of the program.

Summary

Section 4 focused on the findings, implications, recommendations, strengths, and limitations of the project. Section 5 focuses on the project’s dissemination plan.

Section 5: Dissemination Plan

Effective dissemination plans are important to ensure that research results are communicated to the target population. The dissemination plan for this project includes modifying the education program to be in line with expert recommendations and assembling a wellness committee to create an evidence-based smoking cessation program within the facility. This committee will be tasked with adopting and implementing a smoking cessation program that satisfies all stakeholders. The committee will comprise front line employees, administrators, human resources, and the occupational health nurse and department managers. It is also advisable for the organization to facilitate open communication and active decision-making from all stakeholders. The objectives of the smoking cessation program will be to ensure that its scope of action is all-encompassing.

The facility will also be provided with evidence-based metrics by which to measure effectiveness of the smoking cessation program to improve productivity, decrease absenteeism, decrease health care cost, and increase patient satisfaction. Managers, human resource professionals, and nurses should work closely to make sure the cessation program is successfully implemented after the education has been provided. There may be state or national laws that require observation and review, particularly regarding the delivery of pharmacotherapy, insurance coverage, and other services in the program. Evidence-based cessation interventions should be covered under all health insurance plans administered by the organization. Because the wellness program will not be effective without employee engagement, simple guidelines should be prepared and distributed outlining the economic and social benefits of smoking cessation. Awareness

can be raised through e-mails, flyers, posters, or staff education television. It might be necessary for the organization to provide incentives to encourage employee participation in the cessation program. The organization can provide free cessation activities, and employees can be offered rewards after successful completion of the program. Prizes, recognition by coworkers, and certificates of achievement can also be effective. However, the incentive program must correspond with the company's culture. The strategies that will be used to complete this project will include creating a wellness committee that will assume the responsibility of programmatic implementation of this evidence-based program. Information about how smoking cessation programs can impact general health will need to be provided. Also, program support from human resources personnel will be crucial. Dissemination activities will include discussion with stakeholders and employees. It is important that all research reports be delivered to the organizational stakeholders and reviewed. When appropriate, the committee steering this project will be encouraged to do a thorough comparison with other research projects concerning workplace cessation programs. All stakeholders who contribute to the project activities, for instance by participating in expert interviews, will be informed of the results and implications regarding project outcomes.

Analysis of Self

Not knowing what to expect was a great deterrent in this journey to earn my terminal degree in nursing. Although I have always excelled at writing, research was not a favorite activity. Challenges from a busy home life and career, including studying for my clinical nurse specialist certification, almost made this endeavor impossible. I am an

excellent clinician who places patient safety and advocacy above all else. This knowledge gave me the courage to move forward in pursuing my DNP. Project managing is a matter of getting people together who have similar interests and want to make something happen. After I developed the practice-focused question and discovered I was not the only person who believed something needed to be done, it became my mission. Health care professionals cannot encourage healthy behaviors if we do not practice them. This project was instrumental in my professional growth and reinforced my passion for nursing. Evidence-based practice is being promoted in many acute care centers; however, LTC centers such as the one chosen for this project and others like it are not following evidence-based practices in certain areas.

The project completion was difficult because the expectations were sometimes unclear. The particular challenges faced were centered on the overall program. I found distance education to be difficult even though it is purported to provide benefits for the older working student. The amount of writing was considerable. Early on it became necessary to make a very difficult decision to take several quarters off to avoid not finishing the program. Once revitalized and refocused, I consulted with the program director to discuss my frustrations. After several mix-ups with scheduling, a chair change, a redesigned project, and a third chair change, and a proposal rewrite, I am finally at the stage of completion. This journey was longer than anticipated and taught me the importance of ensuring clear direction and expectations.

Summary

This doctoral project was designed to promote smoking cessation among staff at the LTC facility. Through implementation of evidence-based practices, health will be improved. People spend considerable time in the workplace. Without workplace wellness programs, health will not be improved.

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Appendix A: DNP Essentials

Essential I: *Scientific Underpinnings for Practice*

Terminal scholastic groundwork for nursing is provided by the practice doctorate. The technical foundation of this education is reflected in the complex nature of said nursing practice. The possession of a vast range of knowledge is garnered from science and held by the DNP graduate, which affords them the capacity to convert such knowledge expediently and efficiently in order to be beneficial to patients. This preparation to address practice issues is based on natural and social sciences, i.e., biology, genetics, therapeutic science, psychosocial science, and the discipline of complex organizational structures (Zaccagnini & White, 2011).

DNP graduates are prepared to:

1. Integrate nursing science with knowledge from ethics, the biophysical, psychosocial, analytical, and organizational sciences as the basis for the highest level of nursing practice.
2. Use science-based theories and concepts to:
 - determine the nature and significance of health and health care delivery phenomena;
 - describe the actions and advanced strategies to enhance, alleviate, and ameliorate health and health care delivery phenomena as appropriate; and
 - evaluate outcomes.
3. Develop and evaluate new practice approaches based on nursing theories and theories from other disciplines.

Essential II: *Organizational and Systems Leadership for Quality Improvement and Systems Thinking*

DNP graduates must comprehend organizational and systems leadership in order to have optimal patient and healthcare outcomes. The goals of the organization require Doctoral level comprehension and proficiency if they are to meet the goal of eliminating health disparities in the promotion of safe and effective patient care (Zaccagnini & White, 2011).

DNP graduates are prepared to:

1. Appreciate the standards of practice administration to include theoretical and viable approaches to optimizing output and quality of care.
2. Evaluate the effect that policy and procedure have on the health care needs of the chosen patient populace for whom they provide care.
3. Initiate quality improvement stratagem and in so doing create sustainable changes.
4. Evaluate safe and cost efficient care and utilize economic theory to design valuable and practical care deliverance strategy. In addition,
5. Systematize care that addresses evidence based practice.
6. Appraise the possibility of and collaborate with others to ethically direct care.

Essential III: *Clinical Scholarship and Analytical Methods for Evidence-Based Practice*

Basic research is seen as the initial and most fundamental structure of studios activity but a broader view of scholarship has materialized through optional archetypes inclusive of knowledge discovery (Zaccagnini & White, 2011).

DNP graduates are prepared to:

1. Utilize analytical methodology to appraise critically current literature and other data
in order to establish and put into practice the most excellent evidence.
2. Devise and put into practice methods to appraise outcomes, patterns of practice and care systems within a defined setting, organization, or population against benchmarks at the national level to gauge inconsistencies with practice outcomes and populace developments.
3. Propose, guide, and appraise quality improvement methods to support safe, and efficient patient care.
4. Apply pertinent findings that will grow practice guidelines to better the practice and
its environment.
5. Utilize informatics and investigative techniques to:
 - gather data for the generation of evidence for nursing practice
 - generate databases that will put into practice meaningful evidence
 - perform data analysis
 - propose evidence-based interventions
 - portend and examine outcomes

- scrutinize models of outcomes and behaviors
 - recognize gaps in evidence
6. Practice as specialist/consultant in research that is collaborative and generates knowledge
 7. Propagate conclusions of evidence-based practice and research to progress outcomes

Essential VI: *Interprofessional Collaboration for Improving Patient and Population Health Outcomes*

DNP graduates are prepared for interprofessional dimension of health care that will afford them the ability to assist with collaborative team building and triumph over obstacles to interprofessional practice (Zaccagnini & White, 2011).

DNP graduates have preparation in:

1. Team leadership and are instrumental in establishing these teams, taking the lead when suitable
2. Implement practice models, perform peer reviews, devise practice guiding principles, and enact health policy, standards of care, and/or other academic projects.

Appendix B: Pre & Post Smoking Cessation Education Test

- 1. What is smoking cessation?**
 - a. A group of people who get together to discuss their smoking addiction.
 - b. Ceasing the addiction to smoking.
 - c. Telling a friend that you have quit smoking.

- 2. What kinds of harmful chemicals can be found in cigarettes?**
 - a. Poison, Arsenic, Sodium, & Potassium
 - b. Menthol, Nicotine, Tobacco & Ashes
 - c. Lead, Formaldehyde, Insecticide, & Paint Thinner

- 3. Failure to engage in smoking cessation can have the following effects:**
 - a. Increased risk for heart disease, stroke and multiple organ cancers.
 - b. Improved breathing.
 - c. Decreased lower respiratory symptoms

- 4. After you quit smoking, when will you have the same risk of getting cancer as someone who has never smoked?**
 - a. One year
 - b. After ten years.
 - c. Never

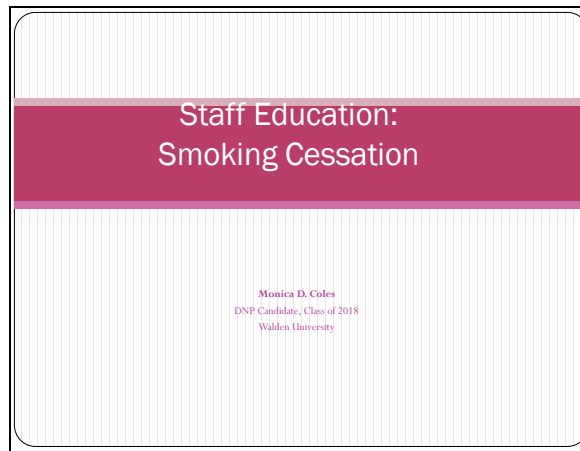
- 5. How many people will die by the year 2020 from smoking?**
 - a. Eight million
 - b. Twenty Million
 - c. One Trillion

- 6. How many days on average are smokers absent from work annually?**
 - a. 6.16
 - b. 20
 - c. 112

- 7. What programs or other assistance is available to assist one to quit smoking and who pays for it?**

Appendix C: Education PowerPoint

Slide 1

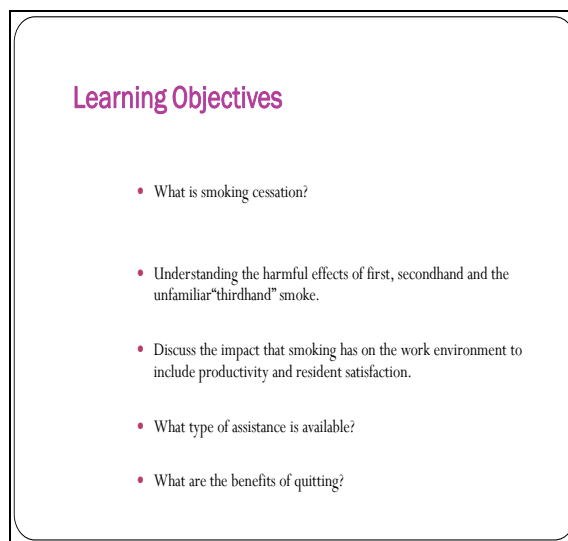


Staff Education:
Smoking Cessation

Monica D. Coles
DNP Candidate, Class of 2018
Walden University

The slide features a title bar with a maroon background and white text. Below the title bar, the presenter's name and affiliation are centered in a small, dark font. The background of the slide is white with a light gray vertical line pattern.

Slide 2



Learning Objectives

- What is smoking cessation?
- Understanding the harmful effects of first, secondhand and the unfamiliar "thirdhand" smoke.
- Discuss the impact that smoking has on the work environment to include productivity and resident satisfaction.
- What type of assistance is available?
- What are the benefits of quitting?

The slide has a white background with a light gray vertical line pattern. The title "Learning Objectives" is in a bold, maroon font. The list of objectives is in a dark gray font, with each item preceded by a maroon bullet point.

Slide 3

Facts


- Smoking is a major cause of preventable deaths worldwide.
- Approximately one million citizens across the globe die annually because of smoking. It has been suggested that by 2020, another 8 million deaths will be linked to smoking.
- There are approximately 34,000 people annually who meet an untimely death related to second-hand smoke.
- A new phenomenon known as third-hand smoke is suspected to be the number one cause of sudden infant death syndrome (SIDS) because infants breathe more rapidly than adults and can suffer 20 times more exposure than that of an adult in the same space.

Slide 4

Smoking Cessation Defined

The process of discontinuing the “addiction” to tobacco smoking.

Yes, it is an addiction!



Slide 5

Harmful effects of smoking

- Cigarettes increase the risk for stroke and heart disease by two to four times, and increases risk for lung cancer by 25 times.
- Blood vessels are damaged by cigarette smoke in that the smoke can thicken the walls, making them narrower, thus preventing the heart from receiving enough oxygen. This results in damaging the heart muscle. Clotting can cause either a heart attack or stroke.
- Lung diseases caused by smoking include emphysema, chronic bronchitis, asthma and lung cancer. Non-smokers are 12 to 13 times less likely to die from these respiratory illnesses than the actual smoker.
- Second-hand smoke creates a vast amount of problems in children and infants, including asthma, ear infections, respiratory infections as well as sudden infant death syndrome (SIDS). Parents are advised by the Centers for Disease Control to protect their children from smoke at all costs.
- Non-smokers suffer many of the same health risks as do smokers, including damage to lining of blood vessels, resulting in heart attacks and strokes, along with increased susceptibility to lung cancer and other respiratory illnesses.

Slide 6

Effects of smoking on the body

<p>BODY:</p> <ul style="list-style-type: none"> ❖ Arms- Decreased blood flow ❖ Stomach- Acid secretions, ulcers ❖ Reproductive organs- Erectile dysfunction, infertility, risk to unborn fetus and miscarriages. ❖ Eyes- Increased risk of cataracts. ❖ Legs- Decreased blood flow. ❖ Bones- Osteoporosis and arthritis. 	<p>APPEARANCE:</p> <ul style="list-style-type: none"> ❖ Teeth- Yellow color, decay, gum disease. ❖ Mouth- Bad breath. ❖ Face- More wrinkles, acne. ❖ Hands- Yellowed finger tips and nails.
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Slide 7

Smoking's effects on the workplace

- Studies show employees who smoke are absent an average of 6.16 days annually due to illnesses as compared to an absenteeism rate of 3.86 days annually for those who do not smoke.
- In the United States, about one death out of five deaths is caused by workplace smoking. This is equivalent to 443,000 deaths, 49,000 of which are said to be directly tied to having second-hand experience.
- The decrease in workplace revenue due to smoking amounts to about \$4.6 billion dollars and an extra \$96.8 billion in loss of productivity annually.
- Those employees who smoke, cost their employers an estimated \$6,000 more per year in healthcare cost.
- Patients perceive waiting for care as poor quality of care and they lose confidence in their caregiver's. Employees who smoke take more frequent breaks than those who do not.

Slide 8

Chemicals found in cigarettes

Cigarettes have the same chemical composition as:

- Nuclear weapons
- Embalming fluid
- PVC Pipe
- Mothballs
- Batteries
- Car exhaust
- Insecticides
- Toilet bowl cleaner
- Lead paint

Slide 9

Smoking's environmental impact


- Contamination exists after the cigarette has been put out leaving toxins on clothing. These toxins accumulate.
- Litter makes the environment unattractive.
- Productivity is decreased.
- Absenteeism rates are increased.
- Healthcare cost are increased.
- Decreased patient satisfaction related to wait times.
- Increased healthcare cost.



Slide 10

Types of Smoking Cessation programs


- Quitting “cold turkey”
- Nicotine replacement therapy.(NRT's)
- Group counseling.
- Telephone –based support.
- Support groups.
- Medication
- Stress management
- Exercise and weight management
- Prevention of relapse



Slide 11

Help & Coverage

- Organizations
- Insurance
- 1-800-QUIT NOW



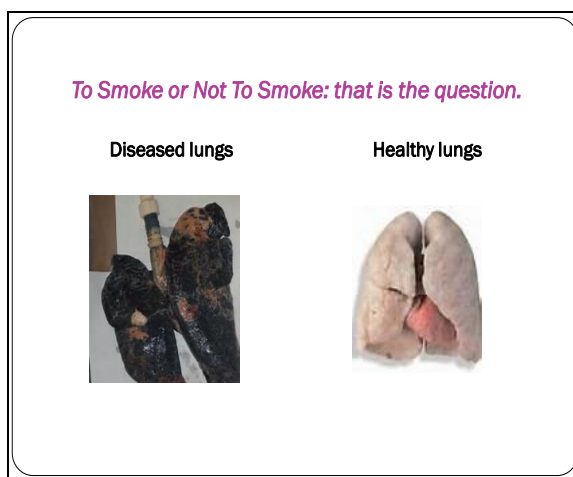
Slide 12



Slide 13



Slide 14



Slide 15

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Appendix D: Education Evaluation Tool

Question 1 How likely is it that you would recommend this education to a friend or colleague?

5	4	3	2	1
Extremely likely	Very likely	Somewhat likely	Not so likely	Not at all likely

Question 2 How relevant is the material to the topic?

5	4	3	2	1
Extremely relevant	Very relevant	Somewhat relevant	Not so relevant	Not at all relevant

Question 3 How clear was the material presented?

5	4	3	2	1
Extremely clear	Very clear	Somewhat clear	Not so clear	Not at all clear

Question 4 How do you feel about the amount of information presented?

5	4	3	2	1
Too much information	Somewhat too much information	About the right amount of information	Somewhat too little information	Not enough information

Question 5 How engaging was the material?

5	4	3	2	1
Extremely engaging	Very engaging	Somewhat engaging	Not so engaging	Not at all engaging

Question 6 How would you rate the presenter's knowledge of the harmful effects of smoking?

5	4	3	2	1
Excellent	Very good	Good	Fair	Poor

Question 7 How clear are you on the takeaways from the education?

5	4	3	2	1
Extremely clear	Very clear	Somewhat clear	Not so clear	Not at all clear

Question 8 How likely would you be to quit smoking after having this education?

5	4	3	2	1
Highly likely	Very likely	Somewhat likely	Not so likely	Not at all likely

Question 9 How much knowledge did you have previously about the alternatives available to help with quitting smoking?

5	4	3	2	1
Too much knowledge	Somewhat too much knowledge	About the right amount of knowledge	Somewhat too little knowledge	Not enough knowledge

Question 10 Do you have any other comments, questions or concerns?
