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Implementing a Smoking Cessation Educational Module for Clinical Staff Members Who Care for Mentally Ill Outpatients

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Walden University

College of Health Sciences

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Anthonia Okeani

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Walden University
2017

Abstract

Smoking Cessation Educational Module for Clinical Staff Members Who Care for Mentally Ill

Outpatients

by

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MSN/FNP/BC, University of Phoenix, 2006

BSN, University of Phoenix, 2004

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

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Abstract

In the United States, cigarette smoking is the main contributor to preventable death in all populations; and, among the mentally ill, the prevalence of smoking is a clinical practice concern. Nearly half of all smokers also have a diagnosis of mental illness compared with 23% of the general population. In an effort to reduce the problem of tobacco use within mentally ill populations, this project sought to create an educational module on smoking cessation for staff in a mental health clinic. The theory of planned behavior was used to guide the project that focused on implementation of a behavior change approach to counter smoking dependence. With evidence obtained from a comprehensive literature search of medical databases and textbooks, the education module was developed for teaching staff in a 30-bed outpatient mental health facility. Staff were taught to administer the education module on smoking cessation and to evaluate the plan. Evaluation of the project effectiveness on the knowledge of clinical staff was determined through the use of questions directed toward understanding professionals' perceptions of the module development and implementation, and the evidence-based educational materials developed for the program. Post tests administered after the staff education showed an increase in knowledge. The full education program was provided to the unit and will be used for staff training and for working with patients in the future. Positive social change is expected to occur because of the increased knowledge among clinical staff who care for mentally ill individuals who smoke. The result should be a safer, healthier setting for both smoking and nonsmoking patients in mental health clinics.

Keywords: smoking cessation, educational module, smoking dependence, mentally ill

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Dedication

I would like to dedicate this project to my parents, my late husband, my three children, my brothers and sisters, my friends, and my professional colleagues who have supported me, who have helped me excel, who have been the inspiration to keep me motivated to continue, and who have been there for me since day one with their love and educational guidance.

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First, I will like to thank God for making this educational journey into a possible reality for me. A lot of individuals helped me to succeed in my education. Therefore, I am thankful for my parents who had instilled in me skills such as discipline, determination, and the idea that education is the key to the doors of many opportunities. Furthermore, I will like to thank my late husband, my three children, and my brothers and sisters who have given me nothing, but love and support because they wanted to see me succeed. Lastly, I will like to thank Dr. Leach and other professors who have helped, encouraged, and motivated me throughout my Walden experience and this project. I will also like to thank the smokers who attempted to quit smoking.

Table of Contents

Abstract

Section 1: Nature of the Project	1
Introduction.....	1
Problem Statement.....	2
Purpose Statement and Project Objectives	3
Significance.....	3
Implications for Social Change.....	4
Evidence-Based Significance of the Project.....	4
Significance to Nursing.....	5
Definition of Key Terms	5
Assumptions, Limitations, Delimitations	6
Assumptions.....	6
Limitations	6
Delimitations.....	7
Summary.....	8
Section 2: Literature Review and Conceptual/Theoretical Framework	9
Introduction.....	9
The Theory of Planned Behavior	9

Theoretical Foundation	10
Sources of Evidence.....	12
Smoking Cessation Tool	13
Smoking Cessation in General Populations.....	14
Local Background and Context	15
Role of the DNP Student.....	16
Role of the Project Team.....	17
Summary	17
Section 3: Approach	19
Introduction.....	19
Practice Focused Statement	19
Analysis and Synthesis	19
The Time Frame.....	21
Evaluation Plan	21
Staff Member Selection	21
Data Collection and Analysis.....	22
<i>Figure 1. Pre- and Post-Test Results and Mean Scores.</i>	<i>24</i>
Summary.....	25
Section 4: Findings, Discussion, and Implications	26

Introduction.....	26
Findings and Implications.....	27
Recommendations.....	29
Project Strengths and Limitations.....	29
Summary and Conclusions	30
Section 5: Dissemination Plan	31
Introduction.....	31
Analysis of Self.....	31
Summary.....	33
References.....	34
Appendix A: Policy Changes	39
Appendix B: Questions to Mental Health Nurses in the Clinic and their Responses	40
SMOKING CESSATION QUESTIONS	41
Appendix C: Educational Packet	43
SESSION 1: <i>Tobacco and Nicotine</i>	43
Causes	43
SESSION 2: <i>Symptoms</i>	43
SESSION 3: <i>Normal symptoms of withdrawal include:</i>	44
SESSION 4: <i>Treatment</i>	45

SESSION 5: *Additional Helpful Website Resources:* 45

Section 1: Nature of the Project

Introduction

According to Crawford (2010), smoking causes many health issues and increases a smoker's risk of developing cancer (including lung cancer), cardiovascular diseases, or osteoporosis. Furthermore, smoking contributes to the acquisition of other diseases that affect the lungs, such as bronchitis and emphysema. Smoking is the main contributor to cervical cancer, hypertension, aortic aneurysm, and more.

Smokers, whatever age, tend to cough more and develop lots of phlegm. Adolescent smokers, in particular, suffer from severe respiratory illnesses, an unhealthy lipid profile, and a weakened physical condition (American Lung Association, 2010). In the United States, cigarette smoking is the main contributor to preventable death (American Lung Association, 2010). Mentally ill individuals suffer from high rates of smoking (Soloway, 2011). Soloway (2012) and Parker, McNeill, and Ratschen (2012) stated that people with mental illness tend to be more dependent on tobacco compared to the general population. Smoking cessation is as difficult as stopping the use of heroin (Morris, 2009).

People with mental illness may be disoriented and confused, which, in turn, could make it more challenging for them to stop smoking. Morris (2009) wrote that individuals who are mentally ill are immensely afflicted by tobacco usage. Continued dependence may be due, in part, to the lack of sufficient information about, and support for, stopping smoking. Clinicians, due to their busy work setting and strained resources, tend to focus on treating mentally ill people without considering the significance of tobacco use (Morris, 2009).

Problem Statement

Many mentally ill patients smoke and tend to have a hard time stopping. In the United States, smoking tobacco accounts for 20% (440,000) of the country's deaths every year, despite its being preventable (Morris, 2009). Tobacco is lethal, and takes more American lives than alcohol use. Between 33% and 45% of smokers will succumb to and end up dying from illnesses caused by tobacco. Tobacco smoking reduces women's lives by 14.5 years and men's lives by 13.2 years (American Lung Association, 2010).

Tobacco affects people with mental illness. "About 50% of individuals diagnosed with serious mental illness are also smokers" (Morris, 2009, para. 2). The Centers for Disease Control and Prevention (CDC, 2014) approximated that 42.1 million individuals, or 18.1% of the population consisting of adults, smoke cigarettes. Out of the 42.1 million individuals, 15.8% are women and 20.5% are men. Smokers' ages are broken down into three groups: "13.0% are between the ages of 18 and 24 years; 17.0% are between the ages of 45 and 64 years; and 8.4% are age 65 years and older" (CDC, 2014, para. 6).

When considering race and ethnicity, the main three groups who smoke are "American Indians/Alaska Natives (non-Hispanic), multiple race individuals (non-Hispanic), and Blacks (non-Hispanic)" (CDC, 2014, para. 7). People who have a GED make up the biggest smoker bracket. Furthermore, Soloway (2012) showed that approximately 80% of individuals suffering from depression want to quit smoking, but many who try fail. The American Cancer Society (2014) pointed out that a total of \$98 billion was used to cover tobacco-related healthcare costs between the years of 2000 and 2004. Smoking causes cancer of the throat, larynx, lips, and other areas, as well as chronic obstructive pulmonary disease, an impaired sense of taste, and other diseases (American Cancer Society, 2014).

Purpose Statement and Project Objectives

The main goal of this DNP project was to develop an educational module on smoking cessation for clinical staff in a mental health clinic who care for mentally ill individuals. The objectives were to deliver the educational information and resources that would promote this goal. The educational aspect of the program incorporated participation in biweekly meetings that featured tests and lectures on smoking cessation (see Appendix C). The meetings will be convened in conjunction with the mental health clinic of the project. All in all, the meetings would help support smoking cessation in, both in the hospital and in mental health clinical settings, due to a more educated clinical staff and a staff that was fully aware of the prevalence of smoking among people with mental illness.

Significance

Current research has identified many approaches that would help reduce smoking among vulnerable and general populations (Doubeni, Reed, & DiFranza, 2010). Studies have been conducted on smoking cessation programs in mental health clinics, yet intervention methods were not used efficiently due to health professionals' disbelief in their ability to adequately provide smoking cessation information without appropriate training or advice as well as their belief that smoking cessation interventions were not effective in the overall treatment for tobacco addiction. Additionally, documentation was often poor regarding smoking status patients' health records (Aveyard et al., 2012). To ensure that smoking cessation interventions are accessible and follow-up is conducted, it is essential that professionals, such as clinical staff members caring for mentally ill patients, understand how to provide advice and support, and record smoking status in patients' health records. Thus, it was crucial to develop an educational module that supported the

instruction of mental health clinical staff about smoking cessation to promote a smoke-free facility and healthier patients.

Implications for Social Change

People with mental illness, according to the CDC (2013), constitute a vulnerable population that tends to suffer from the short-term effects of smoking to the longstanding consequences of health. Individuals with mental illness tend to smoke more than other populations and tend not to seek smoking cessation support services or treatment for any illnesses it might cause. Its 2013 report stated that one-fifth of the United States' population has a form of mental illness, while more than one-third of those individuals smoke tobacco compared to one-fifth of the general population. If a smoking cessation educational module for mental health clinics were developed, clinicians' increased knowledge and awareness could improve the health and lifestyles of people with mental illness. Such a module could also help make mental health clinics a healthy and safe environment for nonsmoking patients. The expected result would be less illnesses, better lifestyles, and lower healthcare costs.

Evidence-Based Significance of the Project

This project is important because it points out a major health detriment for mentally ill patients that the CDC has since made aware. Many mentally ill people smoke (Ebbens & Crane, 2011; Parker, McNeill, & Ratschen, 2012). According to Parker et al. (2012), mentally ill individuals tend to be heavy smokers; they tend to be very dependent on smoking, and are three times more likely to smoke more than the public. Mentally ill patients and smoking are related in a convoluted way via neurobiological, psychosocial, and genetic factors. Many mentally ill patients view smoking as an escape from boredom, a way of interacting (i.e. smoking with a group of friends or passive smoking, which normally occurs when smokers and non-smokers

socially interact in workspaces, restaurants, or bars), and a means of reducing feelings of isolation (Parker et al., 2012).

Significance to Nursing

As a preventable cause of illness and death (U.S. Department of Health and Human Services, 2014), smoking cessation is crucial to nursing since, according to the World Health Organization (2011), tobacco smoking is one of the top three factors that contributed to cancer-related deaths in the United States. “Because people with mental illness tend to be heavy smokers” (Soloway, 2011, p. 24), the application of a smoking cessation educational module in a mental health clinic is essential; tobacco control could reduce the incidence of disability, death, and tobacco-related diseases and because nurses are with patients every hour of the day, they can give consistent support in helping to change a behavior (Rice & Stead, 2009).

Definition of Key Terms

Educational module: includes information about the topic, focus on student-centered learning activities and culminate in a project for students to demonstrate understanding (Sweet, n.d.).

Pharmacological strategies: Nicotine Replacement Therapy (NRT) such as Nicotine gum or the transdermal patch (Shiffman, Dresler, & Rohay, 2013, p. 84). These are the most effective therapy forms for maintaining smoking abstinence.

Person with mental illness: Individual living with a mental health issue that includes, but is not limited to, a changed process of thought (Soloway, 2011).

Counseling: biweekly smoking cessation group meetings that involve people who tell their stories and give support; one-to-one therapist and patient session where a therapist uses a

behavioral approach to support cessation and to address behaviors that stem from the theory of planned behavior (Høie, Moan, Rise, & Larsen 2012; Petry, 2006).

Assumptions, Limitations, Delimitations

Many mentally ill patients smoke and tend to have a hard time stopping. The main objective of this project was to assist them by training staff at the mental health clinic on how to care for and help them quit using smoking cessation. An educational module designed to teach mental health clinicians about smoking cessation is a critical component to resolve future issues of smoking dependence among mentally ill individuals at this out-patient clinic and beyond.

Assumptions

1. Developing this educational module will lead to the promotion of a smoke-free environment if ran successfully.
2. Education and time will be required to dispel the myths among staff about mentally ill patients and tobacco usage.
3. The tests given to the participants throughout the program will be easy to understand and multiple choice.
4. Patients will be at an advantage when clinicians know how to administer smoking cessation interventions upon completion of the program.
5. Inexperienced staff members working in the mental health clinic will be unable to function as smoking cessation administrators and thus, will provide inadequate care to their patients who want to quit smoking.

Limitations

1. The educational module being developed for this mental health clinic may not work well in other clinics.

2. Some clinicians feel that they do not have to provide their support since they believe that smoking cessation does not work; thus, they choose to not take part in the educational module.
3. The unimportance of smoking when compared with competing healthcare demands in the mental health clinic.
4. The misunderstanding that patients do not want to quit smoking.
5. The concern that telling patients something negative, such as being diagnosed with a disease resulting from smoking, may steer them away from undergoing mental health treatment.
6. Not having active participation from clinical staff in the development and implementation of the educational module, which can make the program harder to complete on time and less effective in the treatment of mentally ill patients who smoke.

Delimitations

Relatively little is known about how effective smoking cessation is for decreasing the tobacco use of mentally ill patients nor about how clinical staff members' experiences of implementing smoking cessation will change following the completion of an educational module on that subject. Thus, knowing more about clinicians' expertise with smoking cessation could inform their training or help administrators know more about how to support their staff members, and ensure better delivery of care for the mentally ill patients these staff members care for. This DNP project addresses the problem that mentally ill populations tend to suffer more from the effects of smoking when compared with other populations. To combat this, the project proposed an educational module that will instruct staff members at an out-patient mental health clinic on how to administer smoking cessation programming for their patients, who are trying to quit

smoking and improve their health for the better. An educational module was selected since staff members at the clinic have a direct impact on the well-being of their patients and thus, will be more likely to help decrease tobacco use among them at the conclusion of the module; as a result, a positive and non-smoking setting will ensue. This mental health clinic was chosen because the vulnerable population, mentally ill patients, had a prevalent smoking dependence issue and the clinical staff there were more willing to cooperate to lower the frequency, even if it meant participating in an educational module dedicated to the utilization of smoking cessation services. The project included clinical staff members, me and mentally ill patients, however, the main population undergoing the educational module were the staff members.

Summary

The purpose of the DNP project is to implement an educational module designed for thirty-five clinical staff members at a mental health clinic that will educate them on smoking cessation on a biweekly schedule that will last up to six weeks. As a result, a better quality of care can be delivered to their mentally ill patients who frequently smoke. The recurrent incidence of smoking among vulnerable populations will be addressed at the conclusion of the module by the newly educated clinicians who would apply cessation education and methods to the at-risk mentally ill adult population of their clinic and abroad. In Section 2, I will review the groundwork of this project based on the published literature and discuss the topic of smoking in relation to theories. In Section 3, I will discuss the approach that was taken in the implementation and instruction of the educational module as well as discuss how evaluation and data analysis was carried out. In Section 4, findings resulting from the DNP project will be mentioned. The project's strengths and limitations will be pointed out as well. In Section 5, dissemination and the analysis of myself will be the main focus.

Section 2: Literature Review and Conceptual/Theoretical Framework

Introduction

People with mental illness are more dependent on tobacco than the general public (Soloway, 2012); (Parker, McNeill, & Ratschen, 2012). According to Morris (2009), mentally ill individuals want to quit, yet need the correct information to do so. Approximately 20% of the United States population suffer from mental disorders, but over 40% of them smoke cigarettes: “(a) between 30 and 80% of persons with major depression smoke, (b) 51-70 percent of persons with bipolar disorder smoke, (c) between 62 and 90% of people with schizophrenia smoke, and (d) between 32 and 60% of people with anxiety disorders smoke” (Morris, 2009, para. 10-11). The educational module that the DNP project is proposing is crucial for the health of mentally ill patients now as the clinical staff members that provide care to them are most effective when they know how to administer the right techniques successfully, such as smoking cessation. Some investigators have concluded that theory-driven studies will lead to an improved understanding of smoking cessation (Høie et al., 2012). Thus, studies that used the theory of planned behavior were more beneficial than models that did not use the theory (Høie et al., 2012). As a result, this educational module is founded and supported by this theory.

The Theory of Planned Behavior

Høie et al. (2012) administered a project that was designed around a theoretical model called the theory of planned behavior. The researchers used the theory of planned behavior with two separate age groups and their desire to quit. These groups involved a 16 to 19-year-old group and a 35 to 55-year-old group. The 16 to 19-year-old group consisted of 500 smokers and 500 non-smokers, while the 35 to 55-year-old group consisted of 500 smokers and 250 non-smokers. Along with the theory of planned behavior, the researchers examined subjective norms, the

attitudes towards quitting smoking, and perceived behavioral control, “which measured how much control the person perceived they had, descriptive norms, past behavior, and moral norms” (Høie et al., 2012, p. 45). Subjective norms were only significant to the 16 to 19-year-old group while intention was most dominant in the 35 to 55-year-old group. The researchers concluded that “attitude was the strongest predictor of intentions to quit smoking” (Høie et al., 2012, p. 47). This project was the first of its kind to use the theory of planned behavior as an effective model. Thus, this smoking cessation module will take this theory in mind as it educates clinicians how to support and initiate smoking cessation for mentally ill patients who are more susceptible to struggle with quitting smoking.

Theoretical Foundation

The foundational theory for the smoking cessation educational module for clinicians who care for individuals with mental illness in a mental health clinic is the theory of planned behavior. Ajzen, a social psychologist, developed this theory in 1988. Ajzen (2011) stated that human behavior, alongside the theory of planned behavior, is categorized into three groups: (a) beliefs about cutting down or quitting smoking (most likely outcomes), (b) beliefs about an individuals’ motivation and expectations of people in their lives, (c) beliefs about things that may hinder behavioral change and person’s perception of how much of their behavior they control.

One portion of the transtheoretical theory was borrowed in this project. Rizzo et al. (2010) defined this theory, which describes that change occurs over time. As aforementioned, the theory of planned behavior has several parts: “behavioral beliefs, attitude toward behavior, normative beliefs, subjective norm, behavioral intention, control beliefs, and perceived power” (Tanzi, 2012, para. 5-8, Figure 1). The patient’s belief that he or she can quit smoking is reflected in their attitudes toward a certain behavior. A patient’s belief that significant people

approve or show disdain toward a certain behavior and the thoughts of others about this behavior define the subjective norm. Thus, a supportive clinical staff is important for such a patient, especially for one who attempts to accomplish a difficult task like quitting tobacco use. The self-determination of a patient defines the perceived behavioral control (Tanzi, 2012).

The theory of planned behavior shows that a link between an individual's intention, performance, and attitudes exists (Chang, 2013). Every one of these factors would be looked at by the student at the onset and end of the educational module's implementation. The clinicians who participated would then be asked to talk about every one of these components, which would influence insightful discussion about intent, perceived behavioral control, and attitudes. Smoking cessation does not work when patients do not care to or do not deem themselves ready to take part in it. Thus, nurses or clinicians, after engaging and finishing the educational module, will be more prepared to support and motivate a patient's decision to lower the amount of tobacco they consume.

Similarly, Orem's theory (1949-1957) of self-care supported that nurses who work with patients should promote the best level of self-care. Orem discussed the significance of self-care and the beneficiary roles that nurses play in promoting self-care and patient autonomy. Orem's theory is the foundation for many middle range theories that discuss similar topics of patient autonomy, smoking cessation, social support networks, and patient-directed care. As a result, this theory will serve as a primary reason for creating such an educational module for mental health clinics since Orem saw a patient's self-reliance as the most important concept to any sort of treatment or care. Thus, it "can be applied to the work between a nurse and patient towards smoking cessation" (Orem, 2001, p. 60).

Sources of Evidence

One main source of evidence was utilized in this project, which was literature review. Numerous databases helped support the implementation of a smoking cessation educational module into a mental health clinic. Those that were used to conduct an electronic literature search included: CINAHL, Medline, PubMed, EBSCO, Ovid Plus, Nursing Journals, and Cochrane Library. These searches were conducted with a focus on literature specifically addressing smoking cessation interventions amongst mental health populations and, more broadly, vulnerable or at-risk populations. The words or terms that were used in the search include electronic cigarette, Hooked on Nicotine Checklist (HONC), theory of planned behavior, effects of smoking, mental health clinicians and workers, mentally ill patients, smoking assessment tools, educational module, clinical assessments, and smoking cessation. Evidence that was chosen within this paper to support the project's goal all stemmed from current literature, which discussed the policies of tobacco in behavioral clinics, especially ones containing mentally ill patients.

Search Strategy

A main source of evidence in this project was literature review. The searches sought literature from, preferably the 1990s till the present day, that addressed smoking cessation interventions among mental health populations and, more broadly, among vulnerable or at-risk populations. The evidence chosen to support the project's goal was based on the current literature, which included dissertations, peer-reviewed journal articles, and discussions of tobacco policies in behavioral clinics, especially those treating mentally ill patients. The following databases were used to conduct the searches: CINAHL, Medline, PubMed, Ovid Plus, and Cochrane Library. The following keywords or phrases were used: *theory of planned*

behavior, effects of smoking, mental health, tobacco use, mentally ill patients, smoking assessment tools, training procedures, nicotine addiction, implementation, educational module, theories of smoking, mental health patient care, clinical assessments, and smoking cessation. The information gathered from these searches was then used either as support or background knowledge for the paper topic that was framed around lowering smoking dependence and improving the health of mentally ill patients.

Smoking Cessation Tool

The CDC (2011) backed the usage of screening because it connected parental smoking to the transference of this habit as well as to the devastating effects of secondhand smoke. The National Institute of Health (NIH) has also backed studies that described the tools that can be used to lower nicotine dependence with the help of the HONC (Doubeni et al., 2010).

The HONC, an accessible tool that assesses nicotine dependence in many populations, is used by many clinics (Hendricks, Prochaska, Humfleet, & Hall, 2009). The HONC identifies nicotine-dependent individuals in many populations and “has been widely validated through studies of a range of levels of tobacco dependence” (DiFranza, Savageau, & Fletcher, 2009, p. 706; Scragg, Wellman, Laugesen, & DiFranza, 2009, p. 161). HONC differs from other assessment methods because the participant is not required to mention the frequency and extent of their tobacco use, which tend to be underreported in self-report measures. The HONC assessment tool is accurate in its reflection of dependent individuals although it does not ask the participant to specify the number of cigarettes that they smoke nor the amount of tobacco that they use (Hendricks et al, 2009).

Smoking Cessation in General Populations

The National Institute of Drug Abuse (2012) pointed out that tobacco kills many Americans in the United States, with approximately 443,000 preventable deaths yearly. Although tobacco use has gone down in the last 10 years, 68.2 million individuals or approximately 26.5% of Americans in the United States over the age of 12 years old had used tobacco regularly in 2011 (National Institute of Drug Abuse, 2012). These individuals consisted of 12.9 million cigar smokers, 2.1 million pipe smokers, 56.8 million cigarette smokers, and 8.2 million smokeless tobacco users. The constant use of tobacco in the United States has affected many individuals who have become more vulnerable to permanent and avertible health problems. The CDC (2011) and the U.S. Preventive Services Task Force (2003) evaluated many research studies conducted over 10 years that pointed to clinical preventative services to reduce smoking. The USPSTF (2003) recommended that clinicians provide behavioral interventions, and U.S. Food and Drug Administration-approved pharmacotherapy for cessation to tobacco-dependent adults and to patients who smoke tobacco on top of other cessation interventions with established effectiveness and safety (para. 4).

Several governmental websites such as NIH, the CDC, and the USPSTF recommended that assessing smokers is a motivating factor for the creation of a smoking cessation program (U.S. Preventive Services Task Force (2003); Doubeni et al., 2010). U.S. Preventive Services Task Force (2003) wrote that the suggestions made by the U.S. Prevention Services Task Force since 1996 have called for the use of clinical practice guidelines that are designed to tackle the problem of smoking cessation (para. 21 & 25). Thus, a smoking cessation educational module designed for mental health clinical staffs would greatly help reduce the incidence of smoking

among the mentally ill especially since clinicians are directly related to a patient's care regimen or treatment procedures.

The CDC and the USPSTF organized extensive research concerning approaches that were used in the screening of tobacco usage and for supporting cessation programs (CDC, 2013). Berg (2012) stated that screening, whether it is checking for tobacco-related diseases such as cancer or for assessing the underlying issue of tobacco usage, is a necessary tool. The American Academy of Family Physicians backed up this claim by stating that smoking parents influence their children to begin smoking (Berg, 2012). The NIH emphasized the HONC's importance in promoting cessation when used in conjunction with the "symptomology of problematic tobacco use related in the Diagnostic and Statistical Manual of Mental Disorders" (Hendricks, Prochaska, Humfleet, & Hall, 2009). This assessment method was used in this project and the outcomes were evaluated to support smoking cessation and their positive effects on smokers when clinicians know how to appropriately conduct sessions for it.

Local Background and Context

The main goal of the project was to create a smoking cessation educational module, including program materials and an evaluation plan, for clinicians and nurses who care for mentally ill patients in a mental health clinic. This program's site was a 30-bed, outpatient psychiatric clinic where nicotine dependence and smoking had an enormous yet detrimental effect on the population here. Many individuals with mental illness in the outpatient environment suffer from restrictions on pharmacological intervention methods. Thus, many of them receive medical support services upon leaving the clinical setting. These include nicotine replacement methods, support and follow-up from physicians, which are crucial to the program process (Parker et al., 2012).

The educational module was developed to be implemented in a mental health clinic that provides services for patients with mental health problems. This module will work in this setting because the combination of medical experience, biweekly meetings, and educational resources can increase clinicians' abilities to improve a patient's autonomy and self-care capabilities post-discharge. Thus, the incidence of smoking will reduce. The time is right for this project to be developed and implemented because it will prevent an issue among mentally ill populations from getting worse and will shed light on smoking within vulnerable populations so that future methods can be developed to counteract this dilemma.

The inclusion criteria for the project were as follows: staff clinicians or nurses in a mental health clinic who are 25 to 65-years-old, both women and men. These participants must be complying with the requirements for board certification or licensure as a mental health professional as well as be willing to apply what is learned to the care of their patients at the conclusion of the educational module.

Role of the DNP Student

I planned the entire project with the goal that smoking among the mentally ill will be reduced or eliminated. The student owns a clinic which may bias her outlook on initiating a smoking cessation educational module that promotes a smoke-free policy in one compared to in a hospital setting. My role was to develop an educational module for individuals who would support the reduction of smoking within their clinics. My module will be managed by counselors or substance-use educators. This program consisted of policy creation and the development of education materials for the benefit of clinicians and the patients who they would care for using smoking cessation (see Appendices A and B). Other members of the team, as mentioned in the next subsection, had the responsibility of assessing patients and determining how many patients

demanded for the existence of effective smoking cessation programming given to them by educated and knowledgeable healthcare providers.

Role of the Project Team

The project plan was developed collaboratively. A multidisciplinary team consisting of physicians, psychiatrists, mental health nurses, intake counselors, and psychologists was involved when planning to implement a smoking cessation educational module into the specified mental health clinic. The project's plan also incorporates the views of the patients on the schedule, and both the nature and costs of the program. As a result, the program will have increased participation and a stronger bond between its team and objectives. The implementation plan for the policies was discussed with the director of the mental health clinic. In determining the policies' effects, the director asked that any policy changes, whether proposed or not, had to be approved in their multidisciplinary practice council so that the policies can be reviewed within practice context and improvement before implementation.

Summary

This project was created to evaluate smoking cessation and its effect on the mentally ill. The smoking cessation educational module that stems from this project hopes to lower nicotine dependence by educating the individuals who have the responsibility for caring for mentally ill patients. The HONC, which was mentioned and used to decide whether constant nicotine use was present, is a vital tool that clinicians will be taught how to administer and evaluate. In the next section, this project will indicate future policies that healthcare settings can implement in the hopes of reducing smoking among vulnerable populations. Furthermore, both the evaluation and developmental plans of the project will be discussed as well as the role of the stakeholders. Next, in Section 3, the DNP project's approach to the problem of high tobacco use by mentally

ill patients will be discussed and the results of it will be evaluated and analyzed to determine effectiveness and success among its target population.

Section 3: Approach

Introduction

As mentioned in Section 1, the educational module that will be used in this DNP project is intended to teach clinical staff members how to be better equipped and more knowledgeable when dealing with mentally ill patients who are addicted to nicotine use and need assistance in quitting. Many studies have indicated that mental illness and smoking are connected. Smoking tends to be a result of poor health outcomes (Prochaska, 2011). Thus, its effects are more detrimental to vulnerable populations, especially to mentally ill patients who smoke and whose clinicians fail to resolve their issue of dependency. Therefore, the implementation of a smoking cessation educational module for clinical staff members who care for mentally ill patients in a mental health clinic, as stated above, would help address both health issues for patients and the concern that nicotine is being used to dangerously self-medicate. The educational module operated on a biweekly schedule that featured tests, lesson plans, discussions, and questionnaires designed to actively engage participants through the six-week duration. The results of it are shown later in this section.

Practice Focused Statement

The project statement addressed the need for smoking cessation training for healthcare providers who work with clients who smoke. Thus, a healthier, smoke-free environment for both staff and patients can be achieved.

Analysis and Synthesis

The final stage for implementing a smoking cessation educational module in a mental health clinic required the acceptance of stakeholders, who would share their information and views about the situation and what needed to be added to the module. For the outcomes to be

deemed successful, all stakeholders had to participate fully, including nurses who frequent had contact with the patients, the patients, clinical directors, families of the patients, psychiatric nurse directors, psychologists and/or psychiatrists, and psychiatric department directors.

Berg (2011) wrote that the application of a policy can lead to the reduction of smoking if it concentrates on programming, patient assessment, and the collaboration of clinics. Thus, this project involved facility-based policy development. The first policy developed consisted of “an educational initiative to improve counselor and practitioner knowledge of tobacco cessation medications and their use in substance abuse programming” (Prochaska, Delucchi, & Hall, 2013, p. 1559). The second policy advocated for support of smoking cessation and counseling in mental health clinics.

The focus of this project was to implement a clinical-wide initiative to support a non-smoking environment that treated and assessed patients who were at-risk. The project plan was incorporated into a mental health clinic where a non-smoking policy never existed. Contextually, the plan “was linked to the view supported in the current literature that using tobacco is detrimental to mentally ill individuals,” (Prochaska, 2010, p. 179) such as the impact that tobacco use has on the efficacy of treatment methods. To ensure optimal outcomes, department representatives were required to collect educational materials for the formation of the program. Screening and intervention methods were utilized for the reduction of smoking throughout the organization.

For vulnerable populations, smoking leads to substance-use problems. For example, poor health outcomes in the maintenance of long-term cessation from substance-use leads to “increased negative symptoms, depression, and suicidal ideation” (Prochaska, 2010, p. 178). This project combined education and smoking cessation with recommendations suggested by the

CDC, the NIH, and the USPSTF to develop an educational-based intervention for a mental health clinic.

The Time Frame

A biweekly schedule for the smoking cessation educational module will be enforced for its participants. Because nicotine addiction involves two factors, habitual and physical, the smoking cessation educational module will instruct clinical staff members on this topic and dispel the misconceptions that plague the treatment of mentally ill patients who depend on tobacco use. This program utilizes a class lecture concept, meaning participants can engage and lead discussions, while taking tests and learning from an approved instructor. Additional educational materials and support will be given various times throughout the module to make sure that every participant receives the information necessary for proper implementation and maintenance of smoking cessation.

Evaluation Plan

I planned for the staff who did not participate to evaluate the module upon the completion of its development. The evaluating staff will supervise the process and ensure that the module's plan relates to its objectives and goals. This plan will involve a formative evaluation of the module, which will include information about the outcomes, character, and activities for it. The evaluating staff would then decide whether the module accomplished its objectives and goals, if the educational material was suitable for the module's topic, and if the intervention's timing was sufficient for the population that these clinical staff members help.

Staff Member Selection

Staff members who evaluated the educational materials were chosen by the clinical director, who allowed a two-nurse team to supervise the smoking cessation educational module.

The roles of the team included a leader who runs and directs the program, and a facilitator who becomes team leader in the absence of the leader. The DNP student gave her contact information for any questions or assistance regarding the project's implementation and evaluation step.

Data Collection and Analysis

This educational module included educational material on smoking cessation found online and in current literature. The two main goals of this educational module were to educate nurses on management of smoking cessation, especially in mental health populations, and for the clinical staff members who participated to be able to reciprocate the information they learned from the module, while caring for their patients. This project focused on attention, retention, reproduction, and motivation of its participants. Thus, this educational module become segmented into three parts: a pretest that measured prior knowledge and experiences, a biweekly lecture and discussion of the main learning material that was presented to the mental health clinical staff, and a posttest that measured knowledge gained from the module on top of the knowledge the participants already had. The core learning elements that the participants would be taught includes the following: signs and symptoms of smoking dependency, risk factors of smoking, management of smoking and tobacco use, nurses' or clinicians' role in smoking cessation, resources for smoking cessation, and smoking's impact on the mentally ill.

These core learning elements were presented biweekly on Tuesdays and Thursdays and lasted for a duration of 6 hours with a break after the first 3 hours. The 24 out of 35 clinical staff members who participated were given pretests at the onset of the smoking cessation education module, which was collected by the instructor and followed by the first lectures of the module. After 6 weeks, a posttest was given and then followed by a questionnaire form to assess if

knowledge was gained or whether the participants had learned something new and enjoyed the structure of the module. The pretests and posttests were both completed in the mental health clinic and stored both electronically on USB drives and in a lockable file cabinet in paper form, which ensures confidentiality and limited access. The clinicians and nurses in this module participated voluntarily and had varying levels of education and years of experience.

Data was analyzed and transcribed using Microsoft Excel. The results of both tests were recorded on an Excel worksheet at the times after they were taken and a formula was inputted prior so that once all scores had been entered, the mean score would be determined for the two subsections (pretest or posttest). Both tests consisted of 25 questions in total, 20 knowledge-based questions and 5 questions on the participants' awareness of their role on smoking cessation for the mentally ill. These tests, featuring both knowledge and awareness questions and concepts, were compared through group means to assess if a change occurred in the participants' knowledge and awareness of smoking cessation and its impact in the mental health community (refer to Figure 1). The questionnaire form that followed the smoking cessation educational module consisted of ten yes/no questions and a medium amount of space for feedback, comments, constructive criticism of the module, and questions that can potentially improve the implementation of a future project into the same outpatient mental health clinic or other healthcare organizations.

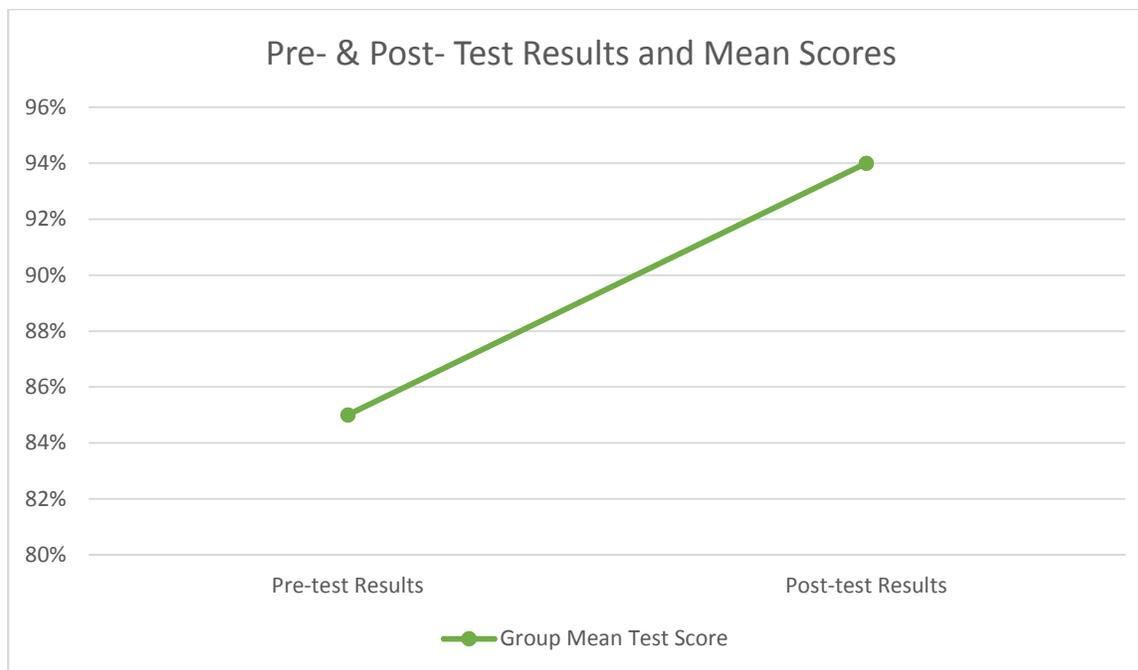


Figure 1. Pre- and Post-Test Results and Mean Scores.

Questionnaire information was gathered by the two-nurse team who worked with the instructor and clinical director. Reports that showed reduced levels of smoking and adherence by nurses to smoking cessation methods and referrals were used to advocate the initiation of smoking cessation programming that stemmed from these nurses' participation in the educational module in the first place. A team made up of two registered nurses, two licensed vocational nurses, and a practitioner, who had more than 10 years of experience, assessed individuals with mental illness to evaluate if a more knowledgeable clinical staff will lead to more interest and participation in smoking cessation. The nurses discovered that the demand for participation by patients was high based on their questionnaire results (see Appendix C). Nicotine-dependent measures along with the HONC were used as signs of participation and as a method for patient referrals on this case.

Summary

This project supports the relationship between smoking cessation and clinical staff knowledge about it so that, in the end, a smoke-free environment is promoted. Educational materials in this project are aimed at the addressment of smoking cessation programs for mentally ill patients who smoke. Policy changes, in addition to the program, were perceived to support a large effort to lower smoking, but this paper discussed a module developed for an outpatient mental health clinic that hoped to create a more educated staff which would lead to lower smoking prevalence among mentally ill patients. This presented the project's overview, the strategy for the literature review, and a suggested data collection method that should be initiated upon the project's completion to determine patient outcomes. In the following section, the module's results and implications will be discussed and so will its strengths and limitations as well. Furthermore, recommendations for this DNP project will be mentioned.

Section 4: Findings, Discussion, and Implications

Introduction

There's a higher incidence of smoking among patients in mental health clinics. Still, smoking cessation remains a minor concern in mental healthcare. Evidence-based guidelines for smoking cessation have not been incorporated into mental health clinical practice yet; thus, mental health patients who are dependent on tobacco are more likely to suffer smoking's painful effects, such as lung disease, emphysema, bronchitis, lung cancer, and hypertension (American Lung Association, 2010). The most helpful patient outcome to combat this epidemic occurs when healthcare professionals understand the changes in their patients that indicate dependency. These changes, such as acquisition of a smoking-related illness or evident withdrawal symptoms that occur after several hours of not smoking are common among average smokers, yet are most harmful to mentally ill ones. After this, implementing care is the next vital step. After the training induced by the DNP project, healthcare personnel will be better prepared to quickly and effectively treat mentally ill patients with nicotine dependence problems through pharmacological methods or smoking cessation programming and the like. This project emulates this process as it will aid in the development of an educational module that increases the knowledge of both nurses and clinicians who care for mentally ill outpatients undergoing smoking cessation treatment.

These healthcare professionals will be subject to two tests, a pre- and a posttest; the mean test scores for both will be analyzed to measure the effectiveness of the educational module on the delivery of care provided by these nurses and clinicians. If the mean of the posttest is higher after the training, then it is assumed that participants learned something. Thus, the goal was for the posttest mean to be higher than the pretest mean to indicate that the participants had learned

about smoking cessation and were now better equipped to implement it on mentally ill patients, where the success rate was low.

Findings and Implications

Crawford (2010) and Doubeni et al. (2010) provides evidence for the educational module, stating that reducing smoking in vulnerable populations (e.g., the mentally ill) is an important component of mental health treatment. This information along with other documentation and educational materials ranging from literature reviews to questionnaires and instructional items, was then presented to the director by me and approval was obtained for the continuation of research on smoking cessation's cost effectiveness upon the introduction of the educational module for smoking cessation that would address the needs of the mentally ill at an outpatient clinic (Crawford, 2010).

This project, along with current research, comments on the best methods to address smoking cessation in the clinical setting and the methods currently being used to promote successful cessation. I utilized educational materials and assessment tools such as smoking questionnaires in the development and initiation of the educational module. I also orchestrated workshops to provide knowledge and understanding of nicotine addiction and treatment of patients to the healthcare staff. This module considered the implications of the research for future studies into smoking cessation for patients with mental illness as well as for those who care for the mentally ill in outpatient clinics as the one used in the project.

In addition to these materials, I sought specific departmental information to determine the level of need in the facility. This approach used a cigarette totals document as part of the plan to determine the number of cigarettes counted for patients during each period of the day to assess the breadth of the problem. This approach provided some baseline observation about the level of

the problem within the clinic that, as a result, provided support that was used as the project's rationale to implement such an educational module for staff. Other tools were used as a basis for the program, such as a PowerPoint presentation on smoking cessation and handouts to be utilized within patient populations. This module had a period of assessment that included interviews, and pretests and posttests given to members of different departments in the facility to determine if the program supported smoking cessation and promoted a more effective use of it in mental health populations.

The overall goal of this evidence-based project was to increase clinicians and nurses' knowledge and awareness of smoking cessation and, thus, decrease the totality of tobacco use among mental health patients. The intended outcome was to, inevitably, decrease complications related to smoking cessation and promote a more educated staff when it comes to treating the mentally ill. Thus, educational workshops and materials were utilized in this project to educate many clinicians and nurses and to, overall, improve the delivery of care to mentally ill patients who are dependent on tobacco use. Ultimately, the implementation of the educational module and the higher mean on tests that this clinical staff took due to participation in it, provides a foundation for integrating well-educated staff and long-term programming for smoking cessation into the mental health facility.

Hopefully, this DNP project will ignite social change in the improvement of health outcomes for individuals with mental illness by reducing nicotine use and dependence. Furthermore, it shall subsequently contribute to the growing focus on reducing nicotine dependence in vulnerable populations after serving as an example of one educational module that will have made staff more effective and capable to deliver beneficial support and care.

Recommendations

A recommendation for future work in this area of mental health is to implement the project and provide an assessment of outcomes relative to the success or failure of the project to help future mental health clinics who face the problem of smoking dependence. Consequently, a recommendation for remediation of the limitations of the project is to develop an analytical approach that includes a quantitative component through which, evaluations of the setting and population can be conducted before and after project implementation to ensure optimal results and higher effectiveness. Furthermore, it is recommended to conduct the project for a longer duration to assess whether more workshops and sessions would positively influence and create a more knowledgeable and effective mental health workforce.

Project Strengths and Limitations

This DNP project focused on the development of an educational module based on existing evidence about methods for smoking cessation that could be later applied in the clinical setting. The project provided a substantive body of research to support the application of the module and foundational research about the importance of this type of module for mental health facilities.

One strength of this DNP project was that it will influence nursing practice and make nurses more proactive in the delivery of document and educational materials to support smoking cessation as well as care in mental health facilities. The project will also make nurses more comfortable with smoking-cessation counseling skills and the use of more evidence-based nursing interventions to enhance the quality of care.

The project was not designed to show the implementation process nor clearly state whether nurses and clinicians' knowledge had increased from the pretest, and this was a

limitation of the project. This limitation impacts the overall project because there was no foundation from which assessments of the effectiveness of the project could be determined outside of anecdotal information provided by those who might have utilized the plan.

Summary and Conclusions

Smoking is a significant problem that has an impact on a variety of different populations. In vulnerable populations, including people with mental illness, smoking can have an impact on health, quality of life, and medication management. Subsequently, these people were the focus of the DNP project as the educational module will benefit them more due to the creation of more active and knowledgeable nurses and clinical staff. The DNP project identified the population in need, reflected a development process, and provided a basis for evaluating the outcomes of the module once implemented. This project reflected the importance of methods for improving patient outcomes through smoking cessation and provided a module through which this goal can be achieved in the future.

Section 5: Dissemination Plan

Introduction

Although different researchers have offered a variety of approaches to smoking cessation intervention of mentally ill smokers who are also patients, there is consensus on the importance of at least four stages to any module or project: dissemination, adoption, implementation, and maintenance (Goodman et al., 1997). Results of research studies tend to be misinterpreted because a study may demonstrate that a treatment is effective and statistically significant (Goodman et al., 1997); however, a treatment cannot be assumed to work for every patient based solely on tested results. Rather, it should be based on individual health records and responses to certain treatments or case-by-case evaluation. Thus, this DNP project aims to help mentally ill patients understand the complexity of their outcomes through their clinicians, so that they can fully participate in choosing their nicotine reduction treatments or in deciding whether to participate in smoking cessation programs.

A key component undertaken in the dissemination plan will be to use an interactive process that will allow patients to make informed choices about their own healthcare (Institute of Medicine, 2001). In this way, the educational module seeks to improve the cost-efficiency of smoking cessation programming in mental health populations and influence health behavior change or reduce health risks for this vulnerable population. As a result, the adoption of this module by the outpatient mental health clinic that was used in this DNP project will help spread social change and benefit mentally ill patients who are dependent on smoking.

Analysis of Self

This DNP project required a considerable amount of focus on the exploration of specific types of research and the identification of previous approaches to smoking cessation. As a

nursing scholar, I applied an analytical perspective to my research and identified issues in the existing research that might have skewed results. This kind of perspective was valuable in determining which sources I included in my project and which sources I did not. By applying an analytical perspective to existing studies, I could gain a closer understanding of the scrutiny needed to create adequate evidence-based practices and develop a proper educational module with research support.

As a practitioner, I gained insight into the issues that can extend from the creation of a module perceived as doing good for the mental health community. From my perspective as a healthcare practitioner, I could not identify an argument against the integration of the DNP project as it provided more benefits than costs to its population. It was not until I explored the perspectives of other practitioners and of the patients in the mental health department that I began to see another side of the issue. For some patients, the use of nicotine was a method of self-medication for certain conditions and the idea of smoking cessation was anxiety-provoking. This gave me a more sympathetic perspective about problems that patients face because of health conditions that could be prevented. It also gave me a new outlook on why their nurses and clinicians should not keep on suggesting or forcing acceptance of smoking cessation or treatments on them without fully understanding their individual situations, or having an increased awareness or knowledge about smoking cessation from the start.

As a project developer, I recognized the importance of considering the views of all the stakeholders in the creation of a new module. This was identified in some of the research studies evaluated in the planning process for the project (Parker et al., 2012; Prochaska, 2013). Working collaboratively with other practitioners to identify information about the need for the module and the best methods for creating the module plan was necessary to ensure the success of it on the

education of nurses and clinicians. This corresponds with several other cessation and program development plans for smoking cessation, including a plan created by Berg (2011). As a project developer, I found this information helpful and I considered the views of multiple people in project planning. This project demonstrates the importance of evidence-based research in directing change initiatives in the clinical setting, and reflects the importance of creating programs that are tailored for specific settings. This DNP process was valuable in terms of my own professional development because I developed analytical skills that will serve me in the development of programs in the future.

Summary

Smoking is a significant problem in populations of people with mental illness. These people not only have a higher degree of nicotine dependence, but also have a higher level of disease related to smoking and lower treatment rates for smoking-related illnesses. Subsequently, this DNP project sought to identify methods of improving smoking cessation attempts through an educational module in the mental health setting. The module, along with the evaluation of patient needs and referrals to services, were utilized to improve patient outcomes. The project was reflective of the need for methods that can enhance access to cessation resources, including electronic cigarettes, nicotine replacement methods, and support mechanisms. Also, it identified the need for those treating mentally ill patients who are dependent on smoking to be more knowledgeable about smoking cessation so that their delivery of care is enhanced and accurate.

References

- Ajzen, I. (2011). Behavioral interventions based on the theory of planned behavior. Retrieved from <http://people.umass.edu/~ajzen/tpb.diag.html#null-link>
- American Lung Association (2010). Smoking facts: tobacco use among children and teens. Retrieved from <http://www.lung.org/stop-smoking/smoking-facts/tobacco-use-among-children.html>
- Aveyard, P., Begh, R., Parsons, A. and West, R. (2012). Brief opportunistic smoking cessation interventions: a systematic review and meta-analysis to compare advice to quit and offer of assistance. *Addiction*, 107, 1066–1073. doi:10.1111/j.1360-0443.2011.03770.x
- Barbeau, A., Burda, J. & Siegel, M. (2013). Perceived efficacy of e-cigarettes versus nicotine replacement therapy among successful e-cigarette users: A qualitative approach. *Addiction Science and Clinical Practice*, 5-8. doi:10.1186/1940-0640-8-5
- Berg, A. (2011). Counseling to prevent tobacco use and tobacco-caused disease. U.S. Preventative Services Task Force. Retrieved from <http://www.uspreventiveservicestaskforce.org/3rduspstf/tobaccoun/tobcounrs.pdf>
- Bullen, C., William, J., Howe, C., Laugesen, M., McRobbie, H., Parag, V., & Walker, N. (2013). Study protocol for a randomized controlled trial of electronic cigarettes versus nicotine patch for smoking cessation. *BMC Public Health*, 13, 210. doi:10.1186/1471-2458-13-210
- Centers for Disease Control and Prevention. (2014). Adult cigarette smoking in the United States: Current estimates. Retrieved from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking/.

- Centers for Disease Control and Prevention. (2013). Vital signs: Current cigarette smoking among adults aged > 18 years with mental illness—United States, 2009-2011. *Morbidity and Mortality Weekly Report*, *62*(5), 81-87.
- Chang, L., Jacobson, T. L., & Zhang, W. (2013). A communicative action approach to evaluating citizen support for a government's smoking policies. *Journal of Communication*, *63*, 1153–1174. doi:10.1111/jcom.12065
- Crawford, J. (2010) Lung cancer. Retrieved from www.webmd.com
- DiFranza, J., Savageau, J., Fletcher, K., Ockene, J., Rigotti, N., McNeill, A... Wood, C. (2002). Measuring the loss of autonomy over nicotine use in adolescents: The Development and Assessment of Nicotine Dependence in Youths (DANDY) Study. *Archives of Pediatric Adolescent Medicine*, *156*, 397-403. doi:10.1001/archpedi.156.4.397
- DiFranza, J., Savageau, J., & Fletcher, K. (2007). Symptoms of tobacco dependence after brief intermittent use: the Development and Assessment of Nicotine Dependence in Youth-2 study. *Archives of Pediatric and Adolescent Medicine*, *161*(7), 704–710. doi:10.1001/archpedi.161.7.704
- Doubeni, C., Reed, G., & DiFranza, J. (2010). Early course of nicotine dependence in adolescent smokers. *Pediatrics*, *125*(6), 1127-1133. doi:10.1542/peds.2009-0238
- Ebbens, V., & Crane, S. (2011). Use of smoking cessation therapies in adult mental health settings. *Mental Health Practice*, *15*(4).
- Hendricks, P., Prochaska, J., Humfleet, G., & Hall, S. (2009). Evaluating the validities of different DSM-IV-based conceptual constructs of tobacco dependence. *Addiction*, *103*(7), 1215-1223. doi:10.1111/j.1360-0443.2008.02232.x

- Høie, M., Moan, S., Rise, J., & Larsen, E. (2012). Using an extended version of the theory of planned behavior to predict smoking cessation in two age groups. *Addiction Research and Theory*, 20(1), 42–54. doi:10.3109/16066359.2011.557165
- Institute of Medicine (US) Committee on Health and Behavior: Research, Practice, and Policy. Health and Behavior: The Interplay of Biological, Behavioral, and Societal Influences (2001). Washington, DC: *National Academies Press (US)*. doi:10.17226/9838. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK43735/>
- Martin, L. J., Zieve, D., Ogilvie, I., & A.D.A.M. Editorial team. (2016). *Nicotine and tobacco*. Retrieved from <https://medlineplus.gov/ency/article/000953.htm>
- Morris, C. (2009). Smoking cessation for persons with mental illnesses: A toolkit for mental health providers. Aurora, CO: University of Colorado Denver.
- National Institute of Drug Abuse. (2012). Drug Facts: Cigarettes and other tobacco products. Retrieved from <http://www.drugabuse.gov/publications/drugfacts/cigarettes-other-tobacco-products>
- Okeani, A. (2016). *Implementing a smoking cessation program in a mental health clinic*. Unpublished manuscript, Walden University.
- Orem, D. (2001). *Nursing: Concepts of Practice* (6th ed.). St. Louis, MO: Mosby.
- Parker, C., McNeill, A., & Ratschen, E. (2012). Tailored tobacco dependence support for mental health patients: A model for inpatient and community services. *Addiction*, 107(Supplement 2), 18-25. doi:10.1111/j.1360-0443.2012.04082.x
- Petry, N. (2006). Contingency management treatments. *British Journal of Psychiatry*, 189, 97–98.

- Prochaska, J. (2011). Smoking and mental illness—breaking the link. *New England Journal of Medicine*, *265*, 196-198. doi:10.1056/NEJMp1105248
- Prochaska, J. J. (2010). Failure to Treat Tobacco Use in Mental Health and Addiction Treatment Settings: A Form of Harm Reduction? *Drug and Alcohol Dependence*, *110*(3), 177–182. doi:10.1016/j.drugalcdep.2010.03.002
- Prochaska, J., Hall, S., Delucchi, K. & Hall, S. (2014). Efficacy of initiating tobacco dependence treatment in inpatient psychiatry: a randomized controlled trial. *American Journal of Public Health*, *104*(8), 1557-1565. doi:10.2105/AJPH.2013.301403
- Rice, V. H., & Stead, L. F. (2013). Nursing interventions for smoking cessation. *Cochrane Database of Systematic Reviews*, *1*, CD001188. doi:10.1002/14651858.CD001188.pub4
- Rizzo A. M., Berselli P., Zava S., Montorfano G., Negroni M., Corsetto P., & Berra B. (2010). Endogenous antioxidants and radical scavengers. *Advances in Experimental Medicine and Biology*, *698*, 52–67. doi:10.1007/978-1-4419-7347-4_5
- Shiffman, S., Dresler, C. M., & Rohay, J. M. (2004). Successful treatment with a nicotine lozenge of smokers with prior failure in pharmacological therapy. *Addiction*, *99*, 83-92.
- Shiffman, S., Ferguson, S. G., Dunbar, M. S., & Scholl, S. M. (2012). Tobacco dependence among intermittent smokers. *Nicotine & Tobacco Research*, *14*(11), 1372–1381. <http://doi.org/10.1093/ntr/nts097>
- Siegel, M. B., Tanwar, K. L., & Wood, K. S. (2011). Electronic cigarettes as a smoking-cessation tool: results from an online survey. *American Journal of Preventive Medicine*, *40*(4), 472-475. doi: <http://dx.doi.org/10.1016/j.amepre.2010.12.006>
- Smith, J., & Firth, J. (2011). Qualitative data analysis: The framework approach. *Nurse Researcher*, *18*(2), 52-62.

- Soloway, E. S. (2012). The lived experiences of tobacco use, dependence, and cessation: Insights and perspectives of people with mental illness. *Health & Social Work, 26*(1), 19-32.
doi:10.1093/hsw/36.1.19
- Sweet, K. (n.d.). What Is an Educational Module? Retrieved from
<http://classroom.synonym.com/what-educational-module-4739884.html>
- Tanzi, M. G. (2012). Translating theory into action: A focus on smoking cessation. Retrieved from <http://www.pharmacist.com/translating-theory-action-focus-smoking-cessation>
- U.S. Department of Health and Human Services. (2014). *The Health Consequences of Smoking—50 years of Progress: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.
- U.S. Preventive Services Task Force (2003). Counseling to prevent tobacco use and tobacco-caused disease: recommendation statement. Rockville, MD: Agency for Healthcare Research and Quality. Retrieved from <http://annals.org/aim/article/744446/counseling-interventions-prevent-tobacco-use-tobacco-caused-disease-adults-pregnant>
- Vick, L, Duffy, S. A., Ewing, L. A., Rugen, K., & Zak, C. (2012). Implementation of an inpatient smoking cessation programme in a Veterans Affairs facility. *Journal of Clinical Nursing, 22*, 866-880. doi:10.1111/j.1365-2702.2012.04188.x
- World Health Organization. (2011). *WHO Report on the Global Tobacco Epidemic, 2011: Warning About the Dangers of Tobacco*. Retrieved from
http://www.who.int/tobacco/global_report/2011/en/index.html

Appendix A: Policy Changes

Policy #1: Practitioners and counselors who work with patients must take part in educational programming that improves their knowledge about tobacco cessation medications and its use on psychiatric patients.

Policy #2: Smoking psychiatric patients will be given the chance to participate in a smoking cessation program that involves counseling and educational materials that support smoking cessation and that involves clinical staff members that have successfully improved their knowledge through participation in the project's smoking cessation educational module.

Appendix B:

Questions to Mental Health Nurses in the Clinic and their Responses

1. **Q:** In your department's patient population, what is the general level of smoking?

Answer: Many nurses stated that the level of smoking is very high.

2. **Q:** How many nicotine-dependent individuals in the population are receiving pharmacological interventions through the supplementation of nicotine?

Answer: Two of the nurses stated that many patients are using them, while most nurses said that they don't know.

3. **Q:** How do you view smoking cessation program's effect on the target population?

Answer: Every nurse said that it improves the health and quality of life of their patients.

4. **Q:** Why will patients who have left the clinic want to continue their participation in the program?

Answer: Four of the nurses said that patients will only continue if there is a motivating factor that pushes them to do so. One nurse said that, "Our patients are unreliable and might not continue."

5. **Q:** What are the problems that are faced from the implementation of this type of program?

Answer: Every one of the nurses said that they will experience the challenges of the lack of physical space to administer the education and the lack of time to educate the population.

SMOKING CESSATION QUESTIONS

For Patient Use

GETTING STARTED

Why should I quit smoking?

Why do I want to quit smoking at this moment?

If I've tried to quit in the past, what worked and what did not?

Was I ready to quit in the past?

How am I ready now to quit smoking?

REVIEW YOUR HABITS

In a day, how many cigarettes do I smoke?

When do I smoke?

Are there any antecedents to smoking?

After I eat, do I smoke?

In the car, do I smoke?

While drinking coffee, do I smoke?

When I am stressed, do I smoke?

When I am angry, do I smoke?

With my friends, do I smoke?

When I smoke, do I use any other substances?

THOUGHTS ABOUT CHANGE

Is there anything to do instead smoking?

What will I do with my hands now that I'm trying to quit smoking?

Are there other things that I can put in my mouth besides cigarettes?

How will I feel about the change?

Upon quitting, will I miss smoking?

Am I capable of dealing with withdrawal symptoms?

MOVING FORWARD

Can I keep track of my habits? How?

How can I keep myself on track?

Is there anyone that I can turn to for support?

How can I make the change stick?

Appendix C: Educational Packet

Tobacco and Nicotine

Note. From “Nicotine and tobacco,” by L. J. Martin, D. Zieve, I. Ogilvie, & A.D.A.M. Editorial team, 2016. Retrieved from <https://medlineplus.gov/ency/article/000953.htm>)

SESSION 1: Tobacco and Nicotine

Nicotine and tobacco can be as addictive as cocaine and alcohol.

Causes

Tobacco, a plant that is grown for its leaves, can be sniffed, chewed, or smoked.

- Nicotine, an addictive substance, is found in tobacco.
- Nineteen known chemicals that can cause cancer are found in tobacco. Together, these chemicals are known as “tar.” Besides these chemicals, many more are contained in tobacco.

In the United States, millions of individuals were successful in quitting smoking. Even though the number of smokers has declined in the United States in the past years, many have switched to using smokeless tobacco. These include products that can be chewed on, sucked on, placed on the cheek or lip, and placed in the nasal passage or in the mouth.

The addictive nature of these products is like tobacco smoking’s own, meaning that both are risky to use.

SESSION 2: Symptoms

Using nicotine can alter your body in many ways:

- It can boost your mood and relieve minor signs of depression; many individuals experience a sense of well-being
- Increase the production of phlegm and saliva

- Makes the intestines work more
- Lowers one's appetite because the fear of gaining weight makes individuals to not want to quit smoking
- Makes the heart beat ten to twenty beats per minute
- Rises blood pressure levels by five to ten mmHg
- Has a possibility to cause diarrhea, nausea, and sweating
- Prompts alertness and memory since some individuals smoke to aid in the accomplishment of certain tasks successfully

Individuals who have smoked for a long time or who have smoked an immense number of cigarettes daily suffer from nicotine withdrawal. It tends to occur two to three hours after the last cigarette has been used. For individuals who want to quit, the symptoms of withdrawal will occur two to three days later.

SESSION 3: Normal symptoms of withdrawal include:

- Anxiety
- Bad dreams/nightmares
- Drowsiness/sleeping problems
- Depression Drowsiness or trouble sleeping
- Feeling, restless, frustrated, or tense
- Increased weight gain and appetite
- Strong desire for nicotine
- Concentration problems

These symptoms may have been noticed when switching from regular nicotine levels to lower levels of nicotine cigarettes or from cutting down the number of cigarettes used.

SESSION 4: Treatment

- Smoking is hard to quit, but there are many preventive methods to smoking, making it easier for people to do it.
- Family members, coworkers, friends, and others can be resources that can support someone's attempt to quit smoking since quitting smoking is hard when done alone.
- There should be a desire to quit if someone wants to be successful in doing so. Many individuals fail to quit smoking at least one time in their lives. Nonetheless, these past failures should serve as motivation to quit the next time.

SESSION 5: Additional Helpful Website Resources:

- George TP. Nicotine and tobacco. In: Goldman L, Schafer AI, eds. *Cecil Medicine*.
- Hays JT, Ebbert JO, Sood A. Treating tobacco dependence considering the 2008 US Department of Health and Human Services clinical practice guideline. *Mayo Clinic Proc*.
- Stead LF, Perera R, Bullen C, Mant D, Hartmann-Boyce J, Cahill K, Lancaster T. Nicotine replacement therapy for smoking cessation. *Cochrane Database System Rev*.

Instructional Methods: Video/DVD, group discussions/presentations, lectures, tests

Length: Two hours per week for as long as six weeks

Learning Objectives: When a participant successfully completes this module, they will be able

to:

1. Define smoking and its risks
2. Recognize levels of educational material on smoking cessation
3. Be more prepared and educated to assist mentally ill patients who are dependent on tobacco/smoking
4. Talk about the smoking cessation educational module's importance and impact