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Educating Staff Nurses on Opioid Use Disorder

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Walden University

College of Nursing

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Moses E. Ikejiofor

has been found to be complete and satisfactory in all respects,

and that any and all revisions required by

the review committee have been made.

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Walden University

2021

Abstract

Educating Staff Nurses on Opioid Use Disorder

by

Moses E. Ikejiofor

MS, Walden University, 2019

BS, University of Maryland, 2004

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2021

Abstract

Opioid use disorder (OUD) is a public health epidemic causing a rise in morbidity and mortality in the United States with disruption of victims and their families' lives and a financial burden on the nation's economy. The problem identified for this DNP project was nurses' lack of knowledge of OUD and the impact on care and attitudes toward OUD patients. Framed within the analysis, design, development, implementation, and evaluation model of instructional design, the purpose was to plan and evaluate a staff education program on OUD. The evidence from the literature to support the need for this project showed that nurses lack knowledge related to OUD and that obtaining the knowledge can result in eliminating barriers to care and stigmatizing attitudes. Content experts for the project included two PhD faculty members in nursing and public health, and a MS prepared project coordinator in the state disability services office. The experts evaluated the detailed curriculum plan and provided a judgment of the degree of relevance for the items of the pretest/posttest. The curriculum plan was evaluated indicating either met or not met with results showing that the 5 learning objectives were judged to be relevant to the evidence-based literature. The pretest/posttest was validated resulting in a content validity index of 1 indicating high content validity. The evidence from the project showed that the education program is ready to present to the intended nurse audience. This DNP project has the potential for improving nursing knowledge to facilitate patient care and reduce stigmatization of OUD patients thus improving the human condition.

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Dedication

This DNP project is dedicated to the Almighty Father, the protector, provider of my needs, and the bedrock of my accomplishments. My project is also dedicated to my supportive and inspiring family for their encouragement, sacrifice, and support during these years of my academic journey. I owe a debt of gratitude to my beautiful and darling wife, Nneka, and my beloved children, Izunna, Ugonna, Chiagozie, Chinonso, and Amarachi, for their unalloyed support and inspiration to me to realize this citadel of my academic dream.

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My beautiful and darling wife, Nneka, and all my children were indispensable and instrumental in their support, encouragement, and prayers to me to fulfill this terminal academic dream. My acknowledgment will not be complete without the mention of my friends and colleagues who were behind the scenes for whom I tapped into their valuable advice and inspiration to accomplish this project.

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Section 1: Nature of the Project

Opioid use disorder (OUD) is a chronic disease with a high potential for relapse. OUD causes dysregulation of the healthy brain structure and function, leading to the 4 Cs of behavior: loss of control of, craving for, continued use of, and compulsive use of opioids despite their adverse consequences (Umberger & Gaddis, 2020; Volkow, 2020). OUD is associated with other comorbidities, including depression, anxiety, pain, and impaired sleep due to the disease's impact on neurobiological and neuronal circuits (Umberger & Gaddis, 2020; Volkow, 2020).

OUD is a public health epidemic leading to a rise in morbidity and mortality in the United States, including a disruption of the welfare and well-being of individual victims and their families and contributing to a financial burden on the U.S. economy. The Society of Actuaries analysis (2018) indicated that the U.S. economy suffered approximately \$631 billion on the opioid epidemic from 2015 to 2018, and this number was projected to rise exponentially at a range between \$172 billion and \$214 billion in 2019 (News Health Management, 2019). In 2014, 47,055 Americans died of a drug overdose, out of which 28,647 (61%) deaths were due to OUD (Rudd et al., 2016). The U.S. drug-related overdose deaths rose by more than 17% from 2015 to 2016 (Centers for Disease Control and Prevention [CDC], 2017).

Although OUD is a chronic, progressive, and complex disease, the disorder is treatable (Wang et al., 2019). Patients with OUD often exhibit a lack of interest in social interaction, social isolation, a feeling of lack of support, stress, and anxiety; nurses are in

a unique role to assist and support patients with addiction to opioids and substances in a manner that would make them feel a measure of confidence and self-worth, thereby potentially creating social change (Umberger & Gaddis, 2020; Volkow, 2020). However, studies showed that nurses lack knowledge of OUD and the skills to provide quality care to this population group (Worley, 2019). The lack of nurses' knowledge of OUD, as evidenced by their negative attitudes, including stigmatization, stereotyping, diminished nurse-patient interaction and attention, and lack of empathy and compassion toward the OUD patients, impacts their ability to provide high-quality care to this group of patients (Worley, 2019). More than 50% of the patients in the long-term care (LTC) facility for which this project will be completed have at least one substance use disorder diagnosis in their file (Nursing Director, personal communication, December 6, 2019). The purpose of this staff education program on opioid use disorder (SEPOUD) was to educate long-term care nurses about OUD so they could translate the new knowledge to improve the care of patients with OUD, and by doing so practice in a more empathic and compassionate manner that potentially leads to social change.

Problem Statement

The problem identified in this Doctor of Nursing Practice (DNP) project was nurses' lack of knowledge of OUD and the potential impact this lack of knowledge might have on the nurses' care and attitudes toward patients with the diagnosis. According to leadership in the facility, the nurses lack knowledge about OUD, and leaders have observed nurses displaying uncaring attitudes toward this population of patients (Nursing

Director, personal communication, December 6, 2019). This observation of a lack of compassion was consistent with the literature, which indicated that many nurses do not have the benefit of evidence-based nursing education and caring for patients with addiction (Smentkowski, 2019). The nurses' lack of knowledge on addiction created a gap in nursing practice leading to suboptimal care of patients (Worley, 2019), while evidence-based literature showed that the gap can be filled when the nurses receive education on OUD (American Nurses Association [ANA], 2018; CDC, 2017; Costello & Thompson, 2015; National Institute on Drug Abuse [NIDA], 2019; Pickard, 2017; Smentkowski, 2019; Umberger & Gaddis, 2020; Volkow, 2020).

Purpose Statement

The significant gap in practice was the nurses' lack of knowledge of OUD, while the evidence-based literature indicated the effectiveness of nurses' education on OUD. Education's effectiveness can lead to a change in negative perceptions and showing responsibility, commitment, and compassion in providing care to OUD patients (Costello & Thompson, 2015; Pickard, 2017). The purpose of this DNP project was to plan, implement, and evaluate a SEPOUD to increase nurses' knowledge as evidenced by a pretest/posttest analysis. However, because of the COVID-19 situation in the United States, the project will not be implemented until after I graduate, when the conditions are more amenable to onsite group education.

Practice-Focused Questions

The DNP practice-focused project questions were the following:

- What evidence in the literature shows that nurses lack knowledge about OUD?
- What evidence in the literature supports that educating nurses regarding OUD can bring a change in knowledge and attitude?
- Will the evaluation of the curriculum and validation of the pretest/posttest items by the CEs demonstrate that the work developed in this project is valid to present to the intended audience?

The desired outcome of SEPOUD was to close the practice gap between the lack of knowledge in practice and the evidence-based literature that presented the effectiveness of education on the care of OUD patients.

Nature of the Doctoral Project

Sources of Evidence

The SEPOUD project was developed using the knowledge obtained from the literature, focusing on the last 5 years other than seminal works. Several pieces of evidence from practice guidelines from health care associations and regulatory bodies such as the ANA (2018), the CDC (2017), and the NIDA (2019) supported the education of clinicians, including nurses, on opioid abuse and treatments. The sources of evidence from the literature on opioid addiction came from several databases, including PubMed, Google Scholar, Cumulative Index to Nursing & Allied Health Literature, Medline, and ProQuest in the Walden University library. The evidence from the literature was placed in the literature review matrix (see Appendix A) and graded using the Johns Hopkins

Nursing Evidence-Based Practice Appraisal Tools (see Appendix C and D) with permission (see Appendix B).

Approach

Following the planning, implementing, and evaluating steps in the Walden University Staff Education Manual (WUSEM), the SEPOUD will utilize the analysis, design, development, implementation, and evaluation model (ADDIE) phases (see Appendix E), which offer learning strategies for promoting workforce development and performance in the context of a real-world practice environment (Patel et al., 2018). The following steps will be used in the approach to the SEPOUD.

Planning

In the ADDIE model analysis phase, I identified the need for SEPOUD during my two visits at the project site and informal interviews with two members of the leadership team, the director of nursing (DON), and the facility administrator. Both the DON and the administrator confirmed the practice gap and the need for an educational program. The anecdotal evidence for the need for the SEPOUD was consistent with the evidence from the literature review (see Appendix A). The site agreed to the project, and I obtained a site agreement. I also sought institutional review board (IRB 11-15-20-0745302) approval per the WUSEM guidelines. The next phase in the ADDIE model was designing and developing, which occurred after my proposal approval. I created the project questions. The literature review consisted of searching for the information guided by the questions, and the literature was graded using the Johns Hopkins

Appraisal tools (See Appendix C and D) with permission (see Appendix B). The curriculum involved searching for an existing curriculum or developing a curriculum, and the pretest/posttest included establishing the learning objectives for staff education curriculum following guidelines of Bloom's taxonomy for learning objectives, and pretest and posttest items (Vanderbilt University Center for Teaching, 2017). The participants will be able to define OUD, understand the brain's physiology with OUD, discuss the nursing care of OUD patients, and discuss medication-assisted treatment. The SEPOUD comprised two separate groups of participants: the content experts (CEs), and the participants. The CEs were selected for their expertise, education, and professional position. They provided a formative evaluation of the curriculum, perform content item validation of the pretest and posttest items, and complete a summary evaluation of the project, process, and leadership after the SEPOUD project. An external PhD educator who was an expert in the assessment advised on the construction of the pretest/posttest items, which were then reviewed for relevancy by the CEs.

Implementing

The implementation phase of the ADDIE model followed formative evaluation during the planning step and approval by leadership. However, because of COVID-19, I will not be implementing the project in the site but have the plan in place. The implementation step will involve the delivery activities of the program to staff nurses and stakeholders. The curriculum plan is essential in this step because the issues of content, method of presentation, and evaluation method need to be clearly defined to

keep in line with the program's expectations and time frame. The participants will include the staff nurses for the educational program. The implementation step will consist of a PowerPoint presentation on evidence-based information on OUD that will cover the learning objectives, content, discussion, and a pretest/posttest (see Appendix I). A pretest/posttest on OUD will be administered to every staff nurse who participates in the SEPOUD to evaluate nurses' knowledge before and after the educational program.

Evaluating

The objective of the evaluation phase of the ADDIE model is to gather feedback from the participants related to the program development and outcome. The SEPOUD will comprise two separate groups of participants. The CEs provided a formative evaluation of the curriculum, performed item content validation of the pretest and posttest items in the planning step, and complete a summary evaluation of the project, process, and leadership after completion of the project. The second group of participants will be the staff who participate in the educational program. However, because of COVID-19, the impact evaluation by participants will not take place until I am able to present the program after my graduation. I will administer the pretest before the program and the posttest at the conclusion of SEPOUD, which will provide an impact evaluation from the education. The participants will also provide a summative evaluation of the presented program with the results used to gain feedback and put that information back into the analysis, design, and development phases of the ADDIE model to revise future presentation opportunities. The results will be analyzed using descriptive statistics.

Significance

Stakeholders include the nurses, patients, their families, and the health care organization. The staff nurses' education may lead to an improved understanding of the disease and may promote a more positive culture of commitment and compassion to care. Educating nurses may also lead to improved care delivery, optimal customer service, and patient satisfaction with the expectation that they will translate this new knowledge acquired from the program into practice. A satisfied patient will likely adhere to their care plan, leading to improved patient conditions, which is beneficial to the patients, the patients' families, the organization, and the nurses. SEPOUD is planned, implemented, and analyzed in the context of the project site's staff and patients' needs. The transferability of SEPOUD may be useful to other health care facilities.

The SEPOUD supports Walden University's vision for social change. Walden University (2019) defined "positive social change as a deliberate process of creating and applying ideas, strategies, and actions to promote the worth, dignity, and development of individuals, communities, organizations, institutions, cultures, and societies" (p. 15). Positive social change leads to the promotion of human and social conditions (Walden University, 2019). Educating staff nurses is crucial in effecting social change about opioid addiction. The SEPOUD would provide new knowledge and skills to the staff nurses regarding compassionate care of patients with problems with OUD so that nurses could transform this knowledge into care to improve OUD patients' human and social conditions. By removing the stereotypes related to the addicted patients, the patients may

feel a measure of compassion and support and perhaps receive hope from the compassionate nurses that will impact the patients, their families, and the community, thereby improving the human condition.

Summary

Opiate use disorder is a severe population health problem in the United States, causing an alarming morbidity and mortality rate and a burden to the economy. Anecdotal information and evidence-based studies showed that nurses' lack of knowledge of OUD impacts how they provide care to patients in their care. The gap in practice was the nurses' lack of knowledge related to OUD. At the same time, evidence-based literature supported the effectiveness of nurses' education on OUD to improve the care they provide to OUD patients. Through a systematic approach guided by the steps in the WUSEM and the ADDIE model's phases, the SEPOUD project was developed to provide the evidence to fill the gap in practice. Positive social change may result from providing more empathic and compassionate care. A discussion of the ADDIE model, local background and context, my role, and the CEs' role in the project is provided in Section 2.

Section 2: Background and Context

The problem identified in this DNP project was nurses' lack of knowledge of OUD and the potential impact this lack of knowledge might have on the nurses' care and attitudes toward patients with the diagnosis. The DNP project questions were as follows:

(a) What evidence in the literature shows that nurses lack knowledge about OUD? (b) What evidence in the literature supports educating nurses regarding OUD can bring a change in knowledge? (c) Will the evaluation of the curriculum and validation of the pretest/posttest items by the CEs demonstrate that the work developed in this project is valid to present to the intended audience? The purpose of this DNP project was to plan, implement, and evaluate a SEPOUD to increase nurses' knowledge as evidenced by a pretest/posttest analysis. However, because of the COVID-19 situation in the U.S., the project will not be implemented until after I graduate, when the conditions are more amenable to onsite group education.

Analysis, Design, Development, Implementation, and Evaluation Model

The SEPOUD followed the WUSEM incorporating the ADDIE model (2019) to guide the steps in the project (see Appendix E). The ADDIE model is a useful, flexible, and systematic educational tool for training and educating adult learners, and is consistent with instructional best practices (CDC, 2019). The ADDIE model is an evidence-based instructional framework that includes interrelated phases, including analysis, design, development, implementation, and evaluation, to facilitate nurses' learning vital for safe and competent clinical performance (CDC, 2019). The ADDIE

phases are interconnected and cyclical, and each step provides a gateway to the next level (CDC, 2019). The model includes opportunities for feedback that is essential for improving educational programs (CDC, 2019).

The ADDIE model's foundation can be traced to World War II when the U.S. military devised strategies for rapidly training their workforce in performing complex technical functions (Patel et al., 2018). Jeffery and Longo (2016) utilized the ADDIE model as an evidence-based instructional stepwise approach and framework for educating nurses. Many studies have shown the ADDIE model to have high reliability and validity as an instructional framework for adult learners (Ismail et al., 2018; Ofoosu-Asare et al., 2019; Xie et al., 2020).

I chose the ADDIE model because this model offers evidence-based practice (EBP) for learning strategies for promoting workforce development and performance in real-world practice environments (Patel et al., 2018). The ADDIE educational model is supported by many academic programs (Lee et al., 2017; Obizoba, 2015; Robinson & Dearmon, 2013) and health care organizations and professional associations and regulatory bodies, including the CDC (2019), National Institutes of Health (Patel et al., 2018), Sigma Theta Tau International, and the Honor Society of Nursing whose mission is to support the learning, knowledge, and professional development of nurses committed to creating a positive difference in health care around the world (Jeffery & Longo, 2016).

Phases of the ADDIE Model

Analysis

The first phase in the ADDIE model is defining the practice issue. The analysis phase involves gathering evidence-based data from the literature review, practice guidelines, and information from the organization leadership regarding the staff nurses' educational needs through the need assessment. The comprehensive data gathered helps to define the practice issue and set the staff education project's outcomes and objectives (Jeffery & Longo, 2016).

Design and Development

After the learning need is identified and analyzed, the ADDIE model's next phases are designing and developing. The design and development phases are the blueprint of the educational project and provide the learning activities outline for addressing the needs identified in the analysis phase (Jeffery & Longo, 2016; Obizoba, 2015; Patel et al., 2018). This phase also involves developing learning materials and determining the mode of delivery of the educational materials to the participants and collaborating with CEs for content review and validation of contents.

Implementation

The fourth phase of the ADDIE model is the implementation of SEPOUD, which will occur after my graduation. The implementation phase involves delivering the learning materials to the program participants using the methods identified in the design and development phases (Jeffery & Longo, 2016; Obizoba, 2015; Patel et al., 2018).

Evaluation

The last phase of the ADDIE model is evaluation. The evaluation is performed either during implementation (formative evaluation) or after the completion of the program (summative evaluation; Kettner et al., 2017; Obizoba, 2015).

Nursing Education and the ADDIE Model

Many hospitals and nursing education programs have used the ADDIE model as a practical task-oriented framework to train nurses and nursing students (Curtis et al., 2017; Lee et al., 2017; Lu et al., 2016). The model was used in Taiwan to train nursing graduates on the use of nursing information system (Lu et al., 2016). The ADDIE model also was used as a framework for nurse preceptor-centered training programs (Lee et al., 2017). The ADDIE model is useful in nursing practice, including patient self-management of type 1 diabetes (Xie et al., 2020) adopted in a Taiwan hospital as an EPB model to improve caring behavior (Hsu et al., 2014) and in the Mayo Clinic as an EBP instructional framework for the management of diabetes (Hasfal, 2018).

Relevance to Nursing Practice

Nurses' Lack of Knowledge of OUD

Despite the medication guidelines and treatments, OUD persists, destroying many lives and contributing to the U.S. health care system's financial burden. Minimal effort has been made to educate frontline staff nurses about OUD, leading to the nurses' lack of knowledge on OUD, thereby causing a gap in practice (Kulesza et al., 2016; Smentkowski, 2019; Worley, 2019). The nurses' lack of knowledge of OUD as

evidenced by their negative attitudes including stigmatization, stereotyping, diminished nurse–patient interaction and attention, and lack of empathy and compassion toward OUD patients impacts their ability to provide high-quality care to this group of patients (Kulesza et al., 2016; Smentkowski, 2019; Worley, 2019). More than 50% of the patients in the LTC facility for which this project will be completed have at least one diagnosis of a substance use disorder, including OUD, in their medical records (Nursing Director, personal communication, December 6, 2019).

Education of Nurses on OUD

Evidence from literature and practice guidelines from health care associations showed that educating nurses on opioid abuse will assist them in changing their negative perceptions, including blame and stigmatization, and in showing responsibility, commitment, and compassion in providing care to OUD patients (ANA, 2018; CDC, 2017; Costello & Thompson, 2015; NIDA, 2019; Pickard, 2017). Studies showed that educating nurses about OUD will improve their knowledge of the disorder, change their negative attitudes toward OUD patients, and improve the quality of care (ANA, 2018; CDC, 2017; Compton & Blacher, 2020; Costello & Thompson, 2015; Kulesza et al., 2016; NIDA, 2019; Pickard, 2017; Smentkowski, 2019; Worley, 2019). Evidence also showed that when nurses provide compassionate care to patients, they are most likely to be more motivated to comply with their plan of care, and the patient outcome will improve (Kulesza et al., 2016; Winsper et al., 2020). A satisfied patient would likely adhere to his or her plan of care, leading to the improvement in patients' condition, which

is beneficial to the patient and patients' families, the organization as well as the nurses (Kulesza et al., 2016; Winsper et al., 2020).

Local Background and Context

Through personal observation of the staff nurses' negative attitudes toward OUD patients, as evidenced by diminished interaction, disengagement with patients, stigmatization, and lack of compassion, the need for this project became evident in my mind. In my informal interview with the DON, he pointed out that most of the facility staff and patients come from low-income circumstances. Both groups are predominantly African American (Nursing Director, personal communication, December 6, 2019). The DON also stated that the facility has 140 patients and about 30 staff nurses, and more than 50% of the patients have a history of a substance use disorder, including OUD (personal communication, December 6, 2019). The nurses' negative attitudes toward OUD patients in the face of a high percentage of OUD patients that the nurses care for made this SEPOUD essential and relevant.

The project site is an LTC facility located in an urban city on the U.S. East Coast. Most of the facility staff and patients come from low-income circumstances, with most members of both groups being from the African American population. The LTC facility has 140 patients and 110 staff members. More than 50% of the patients in this facility have at least one form of substance abuse. The facility does not have an educational program for the staff nurses on opioid addiction and how to provide care for patients addicted to opioids; therefore, an educational program, which was approved by

leadership, was developed to meet the nurses' needs in supporting the patients. The administration of the project site agreed to support the project and sign the site agreement. The location of the project site also added to the relevance of this project. The project site is situated in a central location in the community, allowing patients easy access to drugs on the streets. The state where the center is located ranks among the top five states with opioid-related overdose deaths (NIDA, 2019). In 2017, this state had 1,985 opioid overdose deaths at 32.2 deaths per 100,000 persons, a rate 2 times higher than the national average of 14.6 deaths per 100,000 persons (NIDA, 2019).

The facility strives for a philosophy of care, compassion, and community. The goals of SEPOUD aligned with the vision, mission, and values of the organization. The facility strives for compassionate care to every patient at the center. The LTC facility mission fosters an environment that encourages new, creative ideas that further a commitment to providing the highest quality care for each person they serve.

Role of the DNP Student

Professional Context and Relationship to the Project

As a master's prepared psychiatric and mental health nurse practitioner, I currently work as a provider in an outpatient psychiatric and mental health clinic. Many of the patients under my care are OUD patients. Although the clinic provides care to patients with OUD, the clinic has only therapists, providers, and unlicensed support staff, but no staff nurses. I decided to choose an LTC facility where I worked as an RN supervisor 15 years ago. As an RN supervisor, I worked in collaboration with the director

of nursing and the director of staff education at that time to coordinate nursing functions and activities and educate nurses in my role as supervisor. My leadership experience as an RN supervisor enabled me to appreciate how educating staff nurses about OUD is instrumental in changing nurses' negative attitudes and biases toward patients with OUD. As a psychiatric provider who worked as a frontline nurse, I concluded that nurses need education on OUD to facilitate the therapeutic nurse–patient relationship required to improve OUD patients' quality of care.

Relationship to the Topic, Participants, Evidence, or Institution

My role in this project was the project leader. After approval of the SEPOUD by the Walden University program director, I identified the CEs and collaborated with the LTC facility's leadership to obtain the project site agreement. I also conducted an evidence-based literature review to gather current data and information relevant to this project.

Motivation for the Project

Even though I am unable to implement the SEPOUD until after my graduation, I am excited to implement SEPOUD in this facility where I had worked as a staff nurse. I am inspired and motivated to bring evidence-based information about OUD to improve nursing practice and OUD patients' quality of care. Through the SEPOUD project, I had the opportunity to address the nurses' lack of knowledge about opioid addiction, as evidenced by their negative attitudes toward OUD patients. Through improvement of nurses' knowledge about OUD, a therapeutic nurse–patient relationship will be feasible,

which will empower patients to be responsive to their plan of care, close a gap in practice, and create social change. Literature showed that educating nurses on opioid abuse will help them change their negative perceptions, including blame and stigmatization, and show responsibility, commitment, and compassion in providing care to patients addicted to opioids (ANA, 2018; CDC, 2017; Compton & Blacher, 2020; Costello & Thompson, 2015; Kulesza et al., 2016; NIDA, 2019; Pickard, 2017; Smentkowski, 2019; Worley, 2019).

Potential Biases

The project was conducted without any potential bias. I did not have any close or personal ties or affiliations with the project site management and did not offer compensation that might have influenced the successful completion and implementation of this project.

Role of the Content Experts

The CEs performed a formative evaluation during the planning step of the project, including the curriculum plan evaluation (see Appendix G) and the pretest/posttest content validation (see Appendix J). The CEs also completed the summary evaluation of the program, process, and my leadership after completion of SEPOUD (see Appendix K) and offer suggestions for further improvement. An external PhD educator who was an expert in the assessment reviewed the construction of the pretest/posttest items.

Summary

Section 2 of the project covered the ADDIE model used to frame the project in addressing the problem through planning, implementing, and evaluating the SEPOUD. The background and context of the project were also discussed. The practice questions were addressed by applying evidence from different sources, including information from literature and practice guidelines, to close the gap in knowledge about OUD and improve the care of patients addicted to opioids. As the project leader, I collaborated with the CEs to complete the SEPOUD. Section 3 reintroduces the problem identified in the project, restates the practice-focused questions, and describes the sources of evidence and how data and evidence collected will be analyzed and synthesized.

Section 3: Collection and Analysis of Evidence

The problem identified in this DNP project was the staff nurses' lack of knowledge related to OUD and the potential impact this lack of knowledge might have on the nurses' care and attitudes toward patients with OUD diagnosis. According to leadership in the facility, the nurses lack knowledge about OUD, and nurses display uncaring attitudes toward this population of patients (Nursing Director, personal communication, December 6, 2019). This observation of a lack of compassion was consistent with the literature, which showed that many nurses do not benefit from evidence-based nursing education and training for caring for patients with addiction (Smentkowski, 2019). The nurses' lack of knowledge on addiction created a gap in nursing practice leading to suboptimal care of patients (Worley, 2019), while evidence-based literature showed that the gap can be filled when the nurses receive education on OUD (ANA, 2018; CDC, 2017; Costello & Thompson, 2015; NIDA, 2019; Pickard, 2017; Smentkowski, 2019; Umberger & Gaddis, 2020; Volkow, 2020). Educating nurses about OUD has the potential to change their negative attitudes and improve the quality of care to OUD patients (ANA, 2018; CDC, 2017; Costello & Thompson, 2015; Kulesza et al., 2016; NIDA, 2019; Pickard, 2017; Winsper et al., 2020).

The guiding practice-focused questions to close this gap in practice were (a) what evidence in the literature shows that nurses lack knowledge about opioid addiction? (b) what evidence in the literature supports educating nurses regarding opiate addiction? and (c) will the evaluation of the curriculum and validation of the pretest/posttest items by the

CEs demonstrate that the work developed in this project is valid to present to the intended audience? The practice-focused questions provided a roadmap in this project to search for current evidence to address the practice problem. By using the current evidence from the literature and practice guidelines on the nursing care of patients with OUD and applying the ADDIE model in educating the nurses about the diagnosis, the nurses' knowledge of OUD and the care the nurses provide to patients addicted to opioids will improve. The purpose of this DNP project was to plan, implement, and evaluate a SEPOUD to increase nurses' knowledge of OUD, as evidenced by a pretest/posttest analysis. However, because of the COVID situation in the United States, the project will not be implemented until after I graduate, when the conditions are more amenable to onsite group education. The SEPOUD will include steps in the WUSEM using the ADDIE model (see Appendix E) to guide the project's steps. The ADDIE model offers EBP for learning strategies to promote workforce development and performance in the real-world practice environment (Patel et al., 2018).

Section 3 includes the practice-focused questions and the purpose of SEPOUD. This section also includes a discussion of sources of evidence generated for and by the project, and how the evidence collected will be analyzed and synthesized. Finally, Section 3 includes a discussion of the participants, procedures, and participants' protection.

Practice-Focused Questions

The DNP project's practice-focused questions were (a) what evidence in the literature shows that nurses lack knowledge about opioid addiction? (b) what evidence in the literature supports educating nurses regarding opiate addiction? and (c) will the evaluation of the curriculum and validation of the pretest/posttest items by the CEs demonstrate that the work developed in this project is valid to present to the intended audience? The significant gap in practice was the nurses' lack of knowledge on OUD, while the evidence-based literature addressed the effectiveness of nurses' education on OUD. The effects can include a change in negative perceptions and showing responsibility, commitment, and compassion in providing care to OUD patients (Costello & Thompson, 2015; Pickard, 2017). The purpose of this DNP project was to plan, implement, and evaluate a SEPOUD to increase the knowledge of nurses of OUD, as evidenced by a pretest/posttest analysis. The desired outcome of the SEPOUD was to have a program that had been evaluated and considered robust enough to implement at a future date to close the practice gap between the lack of knowledge in practice and evidence-based literature that presented the effectiveness of education on OUD patients' care. The SEPOUD is designed to provide education about OUD to staff nurses in an LTC facility to improve their knowledge of the disease, change their negative attitudes toward OUD patients, and improve their quality care to these patients. However, because of the COVID situation in the United States, the project will not be implemented until after I graduate, when the conditions are more amenable to onsite group education.

Sources of Evidence

The evidence supporting the practice-focused questions came from the literature organized in the literature review matrix (see Appendix A). The information was graded using the Johns Hopkins Nursing Evidence Appraisal Tool Non-Research (see Appendix C) and Johns Hopkins Nursing Evidence Appraisal Tool Research (see Appendix D) with permission (see Appendix B). Evidence generated by the project came from the literature review (see Appendix A), the curriculum plan (see Appendix F), and the pretest/posttest (see Appendix I). Evidence will be shown in the results of the curriculum plan evaluation by CEs (see Appendix G), the pretest/posttest content validation by CEs (see Appendix J), the evaluation of the staff education program by participants (see Appendix N), the pretest/posttest change in knowledge by participants to be completed after implementing of the program, and the summary evaluation of the staff education by CEs (see Appendix K).

Participants

The SEPOUD comprises two separate groups of participants: the CEs and the education program participants. There were three CEs. The first CE has a doctorate in nursing education and is currently an adjunct faculty member in a regional university in the state. The second CE is a professor at one of the country's reputable universities and has a PhD in public health. The third CE has a master's degree in management and works as the program coordinator at the state's disability services department. The CEs performed a formative evaluation during the project's planning step, including the

curriculum plan evaluation by content experts (see Appendix G) and the pretest/posttest content validation by content experts (see Appendix J). The CEs also provided the summary evaluation of the staff education project by content experts (see Appendix K) after the project was completed. The second group of participants will comprise 20 staff including nurses who will participate in the educational program and will provide impact evaluations upon implementation, the first resulting in evidence obtained upon completion of the pretest/posttest shown in the pretest/posttest change in knowledge by participants, and the second impact evaluation in the evaluation of the staff education project by participants (see Appendix N).

Procedures

The SEPOUD templates used to develop, collect, and evaluate/validate the evidence were developed by my Walden University project chair to facilitate a uniform standard of the DNP project. The templates are not measurement tools and do not need an assessment of reliability and validity. The Johns Hopkins Nursing Evidence Appraisal Tool Non-Research (see Appendix C) with permission (see Appendix B) and the Johns Hopkins Nursing Evidence Appraisal Tool Research (see Appendix D) appraisal tools were developed by experts to assess the literature review components and are not subject to validity and reliability testing, like other tools designed to measure themes and concepts. I used the Content Expert Validity Index Scale (see Table 3).

Content Expert Letter

A letter of introduction (see Appendix O) of myself and the project was placed in each content expert packet. The letter contained instructions for completing the information in the packet with an invitation to contact me at any time to ensure the confidentiality of their participation, which was secured using the content expert's corresponding number identifier on each item in the packet. The literature review matrix (see Appendix A) was included for the CEs review. Information pertinent to the approval of the CEs included the curriculum plan (see Appendix F), evaluation of the curriculum plan by CEs (see Appendix G), pretest/posttest (see Appendix I), and pretest/posttest content validation by CEs (see Appendix J).

Evaluation of the Staff Education Program by Participants

I will develop the evaluation of the staff education program by participants (see Appendix N) based on the objectives of the course relative to the curriculum. The staff educational program will be evaluated by participants after the presentation of the program. I will leave the room and the program evaluations will be placed in a blank envelope and one staff member will deliver the envelope to me. I will analyze the results.

Pretest/Posttest Change in Knowledge by Participants

Upon implementation after graduation, I will develop the pretest/posttest change in knowledge by participants. Participants in the education program will complete a pretest to assess their understanding of OUD at the beginning of the presentation and complete the posttest assessment at the end of the program. I will compile the results of

the pretest/posttest change in knowledge to evaluate the change in knowledge from pretest to posttest.

Summary Evaluation of the Staff Education Project by Content Experts

After completion of the SEPOUD project, the CEs were asked to complete the summary evaluation of the project, process, and my leadership and offer any suggestions for further improvement (see Appendix K). I had someone else delivered the anonymous CE's packets to each CE. Each CE returned the completed form to my mailbox through someone else by anonymous hand delivery. A numeric number was assigned to all the materials reviewed by the CEs to ensure the confidentiality of their identity. I compiled the themes that came from the written comments on the evaluation results.

Protection

I will follow the guidelines of the ethical principles and professional conduct approved by Walden University's IRB to protect all of the project participants by obtaining the project site agreement before beginning the project and ensuring the confidentiality of all materials and information obtained from and relating to the facility, staff, and patients of the facility, including identifiers associated with the organization name, employees or patient names, or city where the project takes place. All participation will be voluntary. All the materials reviewed by the CEs were confidential. The pretest and posttest questions will be confidential with a master list of names of individuals who will participate in the program and corresponding numbers that will be used for the

pretest/posttest. The master list and the CE's paperwork will be kept in a locked file in the facility for 5 years, and then shredded.

Analysis and Synthesis

Curriculum Plan Evaluation by Content Experts Summary

The evidence obtained from curriculum summary evaluation of each learning objective was analyzed and averaged following a dichotomous response for each objective of either 1 (met) or 2 (not met; see Appendix H), related to the overall program curriculum and literature review. I reported the findings in Section 4 using descriptive statistics. The synthesis included a report on the percentage of CEs' ratings for each objective, and the average score of all the learning objectives.

Pretest/Posttest Content Experts Validity Index Scale Analysis

The CEs will evaluate each pretest/posttest questionnaire's validity according to their relevance to the program objectives in the following order: not relevant, somewhat relevant, relevant, and very relevant (see Table 3). I will analyze each item of the pretest/posttest questionnaire using a 4-point Likert scale of 1-4 according to the degree of their relevance (1 not relevant, 2 somewhat relevant, 3 relevant, 4 very relevant; see Table 3) to the program objective. I will also use the evaluation data to calculate the item-content validity index (I-CVI; see Table 3) using the 4-point Likert scale. The I-CVI is calculated as the number of CEs awarding a rating 3 or 4 to each item's relevancy, divided by the total number of the CEs (Zamanzadeh et al., 2015). The I-CVI measures the proportion of agreement on each item's relevancy to the curriculum, ranging from 0

to 1 (Zamanzadeh et al., 2015). The scale content validation index expresses the proportion of the total items that achieved a rating of 3 or 4, that is, the items assessed as content valid (Zamanzadeh et al., 2015). I present the results of the I-CVI in Section 4 using descriptive statistics including percentage and average scores.

Summary Evaluation of the Staff Education Program by Participants

The results of the summary of the evaluation of the staff education program by participants will be analyzed to assist me in making recommendations for further improvement of the educational program.

Pretest/Posttest Change in Knowledge Results by Participants

The pretest/posttests completed by the participants will be analyzed to show the participants' change of knowledge about OUD.

Summary Evaluation Results of the Staff Education Project by Content Experts

The CEs evaluated the project, the process, and my leadership and offered suggestions after the project (see Appendix L). The themes that came from the written comments on this summary evaluation could help drive my responses in findings related to my leadership role.

Summary

Section 3 included a description of how evidence generated by the project was collected, analyzed, and synthesized. A detailed description of the different sources of evidence for the project and the methods used to collect the evidence from the literature were discussed and evaluated using the Johns Hopkins evidence grading tools (see

Appendix C and D). Evidence generated by the project related to the participants was also evaluated by the three CEs and analyzed by me. The CEs evaluated the curriculum plan (see Appendix F) and curriculum summary (see Appendix H) and the practice-focused questions to determine whether they aligned with the project objectives. Each pretest/posttest item was independently assessed by each CE related to whether they were content valid or not content valid using the I-CVI (see Table 3). Evaluation of the curriculum and content validation of the pretest/posttest will result in the final education program to be presented (see Appendix M).

This section also highlighted how I will protect all the participants' confidentiality, including the CEs, following the stipulations of the Walden University's IRB. Section 4 includes discussions of the findings and implications of the data analysis described in Section 3, including recommendations for the staff educational program on OUD. The next section also includes a description of the project team's contribution and the strengths and limitations of the project.

Section 4: Findings and Recommendations

The problem addressed in this DNP project was the nurses' lack of knowledge of OUD and the potential impact this lack of knowledge might have on the nurses' care and attitudes toward patients with the diagnosis. The significant gap in practice was the nurses' lack of knowledge on OUD, while the evidence-based literature presented the effectiveness of nurses' education on OUD. The nurses' lack of knowledge on addiction created a gap in nursing practice leading to suboptimal care of patients (Worley, 2019), while evidence-based literature showed that the gap can be filled when the nurses receive education on OUD (ANA, 2018; CDC, 2017; Costello & Thompson, 2015; NIDA, 2019; Pickard, 2017; Smentkowski, 2019; Umberger & Gaddis, 2020; Volkow, 2020). Education's effectiveness can lead to a change in negative perceptions and showing responsibility, commitment, and compassion in providing care to OUD patients (Costello & Thompson, 2015; Pickard, 2017). The purpose of this DNP project was to plan, implement, and evaluate a SEPOUD to increase nurses' knowledge as evidenced by a pretest/posttest analysis. However, because of the COVID-19 situation in the United States, the implementation and evaluation phase of the developed education will not be arranged until after I graduate, when the conditions are more amenable to conduct an onsite group education that allows for further evaluation. The DNP project's practice-focused questions were the following:

- What evidence in the literature shows that nurses lack knowledge about OUD?

- What evidence in the literature supports that educating nurses regarding OUD can bring a change in knowledge and attitude?
- Will the evaluation of the curriculum and validation of the pretest/posttest items by the CEs demonstrate that the work developed in this project is valid to present to the intended audience?

The desired outcome of the SEPOUD was to prepare a program that has been evaluated and considered robust enough to implement at a future date to close the practice gap between the lack of knowledge in practice and evidence-based literature that presented the effectiveness of education on OUD patients' care.

The sources of evidence included evidence generated for the project, including literature and practice guidelines from health care organizations focusing on the last 5 years other than seminal works, and evidence generated by the project. The evidence supporting the practice-focused questions from the literature was organized in the literature review matrix (see Appendix A) and graded using the Johns Hopkins Nursing Evidence Appraisal Tool Non-Research (see Appendix C) and Johns Hopkins Nursing Evidence Appraisal Tool Research (see Appendix D) with permission (see Appendix B). Evidence generated for the education project was derived from the literature review matrix (see Appendix A), and from the evaluation of the curriculum plan (see Appendix F) and the pretest/posttest (see Appendix I).

Evidence that was shown in the results of the curriculum plan evaluation by CEs (see Table 1), pretest/posttest content validity index scale analysis (see Table 3), and the

summary evaluation of the staff education by CEs (see Appendix K) was analyzed. I will analyze the evidence from the evaluation results of the staff education program by participants and the pretest/posttest change in knowledge results by participants upon implementing the project after my graduation. The descriptive analysis, including percentages and averages were used to analyze the results of evaluations from the CEs. Section 4 consists of a discussion on the local problem and the gap in practice, the project questions, the purpose of the project, how the evidence was generated, findings and implications of the staff educational program, recommendations, and the strengths and limitations of the DNP project.

Findings and Implications

The evidence from the literature to support the need for this project showed that nurses lack knowledge related to OUD and that obtaining the knowledge can result in eliminating barriers to care and stigmatizing attitudes. Three CEs completed an evaluation of each of the learning objectives contained in the curriculum plan, and using dichotomous scale, indicated whether each objective was met or not met based on the curriculum and the overall objective of the staff educational program (see Table 1). The three CEs (100%) indicated that 100% of the learning objectives met the objective of the program (see Table1).

Table 1*Curriculum Plan Evaluation by Content Experts*

Objective number	Objective statement	CE-A		CE-B		CE-C		Comment
		Met	Not met	Met	Not met	Met	Not met	
1	Participants will be able to describe opioid use disorder and its impacts on health, life, and economy	X		X		X		The three CEs indicated that objective #1 is relevant. The three CEs indicated that objective #2 is relevant and necessary The three CEs indicated that objective #3 relevant and needed. The three CEs indicated that objective #4 is relevant The three CEs indicated that objective #5 is relevant, timely, and needed.
2	Participants will be able to describe changes in brain structure and functions related to OUD	X		X		X		
3	Participants will identify at least two negative attitudes and their impacts on nursing care of patients addicted to opioids.	X		X		X		
4	Participants will be able to state at least two benefits of educating nurses about opioid use disorder.	X		X		X		
5	Participants will be able to state at least two ways to improve nurse-patient interpersonal relationship with OUD patients, patients' adherence, and quality of care.	X		X		X		

The results of the curriculum evaluation by the CEs were analyzed (see Table 2).

The analysis of the curriculum plan evaluation results showed that 100% of the learning objectives achieved a score of 1 (met; see Table 2). The average score of each of the learning objectives was 1 (see Table 2).

Table 2*Analysis of Results of Curriculum Plan Evaluation*

Objective number and statement	CE A	CE B	CE C
1 Participants will be able to describe opioid use disorder and its impacts on health, life, and economy.	1	1	1
2 Participants will be able to describe changes in brain structure and functions related to OUD	1	1	1
3 Participants will identify at least two negative attitudes and their impacts on nursing care of patients addicted to opioids.	1	1	1
4 Participants will be able to state at least two benefits of educating nurses about Opioid use disorder.	1	1	1
5 Participants will be able to state at least two ways to improve nurse-patient interpersonal relationship with OUD patients, patients' adherence, and quality of care.	1	1	1
Scores:	Objective met = 1	Objective not met= 2	Average = 1

The pretest/posttest validation results were analyzed using content validation index (CVI) and a 4-point Likert scale ranging from 1 to 4 (1 not relevant, 2 somewhat relevant, 3 relevant, and 4 very relevant; see Table 3). There were no pretest/posttest items evaluated with a score of 1 (not relevant) or 2 (somewhat relevant). Ten pretest/posttest items (100%) received a score of 3 (relevant) or 4 (very relevant; see Table 3). Each pretest/posttest item had a CVI of 1 showing that each pretest/posttest item was valid to the curriculum, learning objectives, and the overall program objective (see Table 3). The CVI was derived by dividing the total number of CEs who evaluated the pretest/posttest as relevant (3) or very relevant (4) by the total number of CEs (see Zamanzadeh et al., 2015).

The analysis of the pretest/posttest content validity index scale included the average scores, the percentages, and CVI of each pretest/posttest item. Results indicated that 60% of the pretest/posttest items (Items 2, 4, 6, 7, 8, and 10) received 4 (very relevant; see Table 3) by all CEs while 10% of the pretest/posttest items (Item 5) received 3 (relevant). The

analysis also showed that 30% of the pretest/posttest items (Items 1, 3, and 9) received either 3 (relevant) or 4 (very relevant) by the CEs (see Table 3). The analysis showed an average score of 3.73 for the overall pretest/posttest evaluation results (see Table 3). A total of 10 pretest/posttest items (100%) were analyzed as valid (see Table 3). The CVI for each of the pretest/posttest items was 1 (see Table 3).

Table 3*Pretest/Posttest Content Item Validity Indexes*

Pretest/posttest items numbers and questions	CE-A	CE-B	CE-C	CVI
1. According to the Compton and Blacher (2020), what is the average number of people in the United States who die of opioid overdose per day?	4	3	4	1
2. According to the National Institute of Drug Abuse (NIDA, 2019), what is the estimated average dollar amount per year spent on patients' care for issues relating to prescription opioid abuse?	4	4	4	1
3. According to the National Institute of Drug Abuse (NIDA, 2019), what percentage individuals who abuse heroin began with abusing prescription opioids?	3	3	4	1
4. In the literature, Kulesza et al. (2016), Smentkowski (2019) and Worley (2019) showed that nurses exhibit the following negative attitudes toward patients with opioid use disorder EXCEPT	4	4	4	1
5. What are two examples of medication assisted treatment?	3	3	3	1
6. What is the primary neurotransmitter responsible for opioid use disorder?	4	4	4	1
7. According to Worley (2019), which of the following statements about the frequent use of opioids is(are) true?	4	4	4	1
8. True or false: According to Umberger and Gaddis (2020), patients who have opioid use disorders are susceptible to depression, anxiety, insomnia, impaired social interaction, social isolation, and low self-worth	4	4	4	1
9. True or false: According to Umberger and Gaddis (2020), about 53% Americans attribute addiction to disease while 44% say addiction is indicative of lack of a person's willpower or discipline.	3	4	3	1
10. In the literature, Umberger and Gaddis (2020), Volkow (2020), opioid use disorder is more of a behavior induced condition than a neurobiological disease.	4	4	4	1
Evaluation scales:				
Not relevant=1	Somewhat relevant= 2	Relevant=3	Very Relevant=4	
CVI Score of 1	Average Pretest/Posttest Item Score = 3.73			

The CEs were asked to comment on their perceptions about the project relating to the project, the process and my leadership, and any suggestions on areas of improvement. Three themes, including relevant, needed, and timely, were notable in CEs' overall project responses. The CEs used descriptions such as "interesting project process" and "well organized" to describe the project process. Words such as "respectful," "communicative," and "professional" were also notable in the CEs' description of my leadership. All the CEs indicated that they enjoyed being asked to evaluate the project, and they did not offer any significant areas for improvement. However, one CE expected effective dissemination of the project to both staff nurses and patients across various health care settings.

The desired outcome of SEPOUD was to prepare a program that had been evaluated and considered robust enough to implement at a future date to close the practice gap between the lack of knowledge in practice and evidence-based literature that presented the effectiveness of education on OUD patients' care. No unanticipated limitations impacted the formative evaluation of results. However, because of the current COVID-19 problem in the United States, I will not implement the project until after my graduation, when the conditions are more amenable to onsite group education.

Recommendations

Public health officials and medical professionals have focused more on medication treatment to address the U.S. opioid epidemic. Despite the medication prescription guidelines and treatments, OUD continues to be pervasive, destroying many lives and

overwhelming the U.S. economy. Moreover, less attention has been paid to educating the frontline staff nurses about OUD, leading to the nurses' lack of knowledge on OUD and causing a gap in practice (Kulesza et al., 2016; Smentkowski, 2019; Worley, 2019). The nurses' lack of knowledge on OUD as evidenced by their negative attitudes, including stigmatization, stereotyping, diminished nurse–patient interaction and attention, and lack of empathy and compassion toward OUD patients, impacts their ability to provide high-quality care to this group of patients (Kulesza et al., 2016; Smentkowski, 2019; Worley, 2019).

To sustain the staff education program of OUD, the organization should incorporate this educational program in the center's policies and procedures. The facility's staff education department should integrate this program as part of the annual competence/skill training, new employee orientation packet, routine in-service training for all nurses of the facility and across all other centers within the organization. Regular and random monitoring of the program by the nurse managers and directors is necessary to assess the educational program's performance and sustenance. The managers and directors should make themselves available to offer support, encouragement, and mentorship to nurses to promote their commitment, compassion, advocacy, and therapeutic relationship toward patients diagnosed with OUD. Further education on nurses' professional conduct and ethical principles is necessary to address nurses' negative attitudes toward OUD patients and promote the therapeutic nurse–patient relationship. The patients may be empowered and motivated to adhere to their care plans when nurses show respect, commitment, compassion, and empathy toward them, leading to creation of positive social change.

Contribution of the Doctoral Content Experts

Content experts for the project included two PhD faculty members in nursing and public health, and a MS prepared project coordinator in the state disability services office. The CEs evaluated the curriculum and validated the pretest/posttest, thereby generating evidence for the project. The CEs performed a formative evaluation during the project's planning step, including the curriculum plan evaluation by CEs (see Appendix G) and the pretest/posttest content validation by CEs (see Appendix J). The CEs also completed the project summary evaluation by CEs, relating to the overall project, process, and my leadership, and offered further improvement suggestions (see Appendix K). An external PhD educator who is an expert in assessment reviewed the pretest/posttest items' construction and made recommendations that were incorporated.

Strengths and Limitations of the Project

A major strength of the project was the use of three experienced independent CEs who ensured authenticity and validity of the project materials, curriculum, learning objectives, evidence from the literature review, and pretest/posttest items related to the program's overall desired outcome in closing the practice between lack of knowledge and the evidence-based literature. The evaluation method that provided confidentiality of the CEs, participants, and evaluation materials was essential to guard against the project leader's potential bias and personal influence on the evaluation results. I expect a change in knowledge from pretest to posttest and evaluation of the program to be positively received. Another strength was the CEs' summary evaluation, which provided insights

and themes concerning the overall project, the process, and my leadership, including suggestions for improvement of the project.

The purpose of this DNP project was to plan, implement, and evaluate a SEPOUD to increase nurses' knowledge as evidenced by a pretest/posttest analysis. However, because of the COVID-19 situation in the United States, the project will not be implemented until after I graduate, when the conditions are more amenable to onsite group education. Although the CEs were experts in their respective fields of study, none had expertise in psychiatry or substance abuse disorder. Further education on nurses' professional conduct and ethical principles is necessary to address nurses' negative attitudes toward OUD patients and promote the therapeutic nurse–patient relationship.

Summary

The purpose of this DNP project was to plan, implement, and evaluate a SEPOUD to increase nurses' knowledge as evidenced by a pretest/posttest analysis. However, because of the COVID-19 situation in the United States, I will not implement the project until after I graduate, when the conditions are more amenable to onsite group education. The desired outcome of SEPOUD was to have a program that had been evaluated and considered robust enough to implement at a future date to close the practice gap between the lack of knowledge in practice and evidence-based literature that presented the effectiveness of education on OUD patients' care. Three CEs completed a formative evaluation of the project material, ensuring authenticity and validity. The project's summary evaluation by CEs provided insights into the overall project, process, and my

leadership, including suggestions for improvement. The evaluation completed by the CEs was analyzed using descriptive statistics, including percentages and averages. Upon implementing the project, I expect the impact evaluation to show a change in nurses' knowledge about OUD, as evidenced by pretest/posttest results. Section 5 includes a dissemination plan, analysis of self, and a summary of the project.

Section 5: Dissemination Plan

The dissemination of this project will help nurses at the LTC facilities improve their knowledge about OUD and to improve care of patients with a diagnosis of OUD. The dissemination activities will involve PowerPoint presentations, group discussions, presentation of the program outcome during interprofessional care team meetings at the project site, annual staff competence training, and new employee orientation at the LTC facility. The project outcome is appropriate for staff nurses providing care to patients diagnosed with substance abuse, including OUDs across different health care settings. The project manuscript can be disseminated for publication to a broader audience in ANA journals. Section 5 includes a description of the proposed dissemination plan, self-analysis, and final summary.

Analysis of Self

Transitioning in the doctoral program from being a consumer of knowledge, in which my task was to follow the academic coursework and follow my professors' lecture guide, to being responsible for initiating a DNP project to solve a significant practice problem was a big shift in my professional and scholarly journey. Writing a DNP project is a challenging but important part of the scholar-practitioner experience. At times, I entertained some fears, self-doubt, and ambivalence about my role as a project leader and manager, from my first onsite visit to the facility and meeting with the organization's leadership to discuss facility needs for the different phases of the project. As a DNP-prepared nurse, I understand that one of my major roles is to identify practice issues in

clinical practice settings and gather evidence-based information from literature and practice guidelines that can be translated into practice to solve the practice problem. As a DNP-prepared nurse, I am also aware that a professional responsibility is to advance the professional nursing practice in organizational and system leadership and health care policy to improve patients' health outcomes by applying EBP. Conducting this project allowed me to hone my project skills and prepared me for my long-term professional goals.

The desired outcome of the SEPOUD was to prepare a program that had been evaluated and considered robust enough to implement at a future date to close the practice gap between the lack of knowledge in practice and evidence-based literature that presented the effectiveness of education on OUD patients' care. This SEPOUD was designed to provide education about OUD to staff nurses in the LTC facility to improve their knowledge about the disease, change their negative attitudes toward OUD patients, and improve their quality of care. However, because of the COVID situation in the United States, I will not implement the project until after I graduate, when the conditions are more amenable to onsite group education.

Summary

The SEPOUD was designed to provide education about OUD to staff nurses in the LTC facility to improve their knowledge about the disease; change their negative attitudes, including stigmatization, lack of compassion, lack of empathy, and diminished interaction toward OUD patients; and improve their quality of care. The project's

expected outcome through evidence provided by the pretests/posttests is to improve the staff nurses' knowledge of OUD so they can translate the new knowledge into OUD patients' care. When nurses provide compassionate care to OUD patients, they may be more motivated to adhere to their care plan, causing their condition to improve, which will be beneficial to them, their families, the organization, and the nurses, and will promote positive social change in society.

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Worley, J. (2019). Effective strategies for working with patients with substance use disorders. *Journal of Psychosocial Nursing & Mental Health Services*, 57(9), 11–15. <https://doi.org/10.3928/02793695-20190815-02>

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Development of an instrument for measuring patient-centered communication.

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Appendix A: Literature Review Matrix

Full Reference	Theoretical / Conceptual Framework	Research Question(s) / Hypotheses	Research Method ology	Purpose	Conclusions	Grading The Evidence
Compton, P., & Blacher, S. (2020). Nursing education in the midst of the opioid crisis. <i>Pain Management Nursing</i> , 21(1), 35–42. https://doi- org.ezp.waldenulibrary.org/10.1016/j.pmn. 2019.06.006	Descriptive	Emphasis on Educating nurses about SUD	EBP Support	Describes need for educating nurses about OUD and care of patients with OUD	Drug addiction as a chronic disease	Level V Quality-A
Costello, M., & Thompson, S. (2015). Preventing opioid misuse and potential abuse: The nurse’s role in patient education. <i>Pain Management Nursing: Official Journal of the American Society of Pain Management Nurses</i> , 16(4), 515–519. https://doi:10.1016/j.pmn.2014.09	Descriptive	Exploring Nurses’ Knowledge of and attitude toward Opioid use disorder (OUD)	Evidence-Based Practice (EBP) Support	The purpose is to improve nurses’ knowledge of OUD	Less than 50% of the nurses have knowledge gap about OUD	Level V Quality-A
Kulesza, M., Matsuda, M., Ramirez, J.,	Descriptive	Investigating Stigma	Evidence-Based	To understand	Participants	Level V

<p>Werntz, A., Teachman, B., & Lindgren, K. (2016). Towards greater understanding of addiction stigma: Intersectionality with race/ethnicity and gender. <i>Drug and Alcohol Dependence, 169</i>, 85–91. https://doi.org/ezp.waldenulibrary.org/10.1016/j.drugalcdep.2016.10.020</p>		<p>and implicit bias toward OUD</p>	<p>Practice (EBP) Support</p>	<p>how stigmatization of addiction influence behavior toward OUD patients</p>	<p>harbor implicit bias against patients with OUD</p>	<p>Quality-A</p>
<p>Pickard, H. (2017). Responsibility without blame for addiction. <i>Neuroethics, 10</i>(1), 169-180. https://doi.org/ezp.waldenulibrary.org/10.1007/s12152-016-9295-2</p>	<p>Responsibility without blame framework</p>	<p>The moral model of addiction is associated with stigmatization of addiction</p>	<p>Evidence-Based Practice (EBP) Support</p>	<p>To interrogate our own attitudes and responses about drug addiction</p>	<p>The moral model of addiction leads to stigma and harsh treatment of OUD patients</p>	<p>Level V Quality-A</p>
<p>Smentkowski, R. (2019). Every nurse is an addiction nurse! <i>New Jersey Nurse, 49</i>(3), 11. https://ezp.waldenulibrary.org/login?qurl=https%3A%2F%2Fsearch.proquest.com%2Fdocview%2F2246237680%3Faccountid</p>	<p>Descriptive</p>	<p>Developing educational program for nurses about addiction</p>	<p>Evidence-Based Practice (EBP) Support</p>	<p>To improve nurses' knowledge about addiction</p>	<p>Nurses lack knowledge of OUD</p>	<p>Level V Quality-A</p>

%3D14872						
Society of Actuaries (SOA). (2018). <i>Opioid epidemic cost the U.S. economy at least \$631 billion over four years: Society of Actuaries' Analysis</i> . https://www.soa.org/resources/announcements/press-releases/2019/opioid-epidemic-cost-631-billion	Descriptive	Morbidity, Mortality and Financial burden of Opioid Disorder	Evidence-Based Practice (EBP) Support	Analysis of Opioid epidemic	Opioid epidemic constitutes a financial burden to the US economy	Level V Quality-A
Umberger, W., & Gaddis, L. (2020). The science of addiction through the lens of opioid treatment for chronic noncancer pain. <i>Pain Management Nursing: Official Journal of the American Society of Pain Management Nurses</i> , 21(1), 57–64. https://doi.org/ezp.waldenulibrary.org/10.1016/j.pmn.2019.09.001	Descriptive	The science of Addiction	Evidence-Based Practice (EBP) Support	Understanding addiction as a brain disease	Addiction is a chronic and relapsing brain disease	Level V Quality-A
Volkow, N. (2020). Personalizing the treatment of substance use disorders. <i>The American Journal of Psychiatry</i> , 177(2),	Descriptive	Neuroscience of Addiction	EBT Support	Describing the Neuroscience of Addiction	Addiction is a chronic disorder of the brain	Level V Quality-A

113–116. https://doi.org/10.1176/appi.ajp.2019.19121284						
Wang, S., Chen, Y., Lee, C., & Cheng, C. (2019). Opioid addiction, genetic susceptibility, and medical treatments: A review. <i>International Journal of Molecular Sciences</i> , 20(17). https://doi.org/10.3390/ijms20174294	Descriptive	Biological mechanisms of opioid addiction and opioid receptors	EBT Support	Describing Biological mechanisms of opioid addiction and opioid receptors	OUD has a genetic susceptibility	Level IV Quality- A
Winsper, C., Crawford-Docherty, A., Weich, S., Fenton, S., & Singh, S. (2020). How do recovery-oriented interventions contribute to personal mental health recovery? A systematic review and logic model. <i>Clinical Psychology Review</i> , 76, 101815. https://doi.org/10.1016/j.cpr.2020.101815	Logic model methodology	Recovery-oriented interventions	EBT Support	Describing the theoretical framework of recovery-oriented interventions	Recovery-oriented interventions contribute to personal mental health recovery.	Level IV Quality-A

<p>Worley, J. (2019). Effective strategies for working with patients with substance use disorders. <i>Journal of Psychosocial Nursing & Mental Health Services</i>, 57(9), 11-15. https://doi.org/ezp.waldenulibrary.org/10.3928/02793695-20190815-02</p>	<p>Empathy and perspective taking</p>	<p>Negative Attitudes Toward People with SUDs</p>	<p>EBT Support</p>	<p>Describing lack of knowledge about the neurobiology of addiction</p>	<p>Barriers to providing effective care include lack of knowledge of the neurobiology of addiction and evidence-based strategies for care</p>	<p>Level V Quality-A</p>
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Moon/May 2020

Appendix B: Johns Hopkins Permission

RE: Thank you

May 29 at 4:01 PM

Mary Rosenberger <mrosen55@jhu.edu>
To: moses ikejiofor <ugostacy@yahoo.com>
Moses,

This is what my Dean of Clinical Placements, Dr. Michal Goodwin said regarding citing that document.

I hope this helps.

Mary

"Usually one can legally cite something if it is published. If it comes from Hopkins itself, it is likely from the hospital. They too would not put anything out unless it could be cited. If he wants to use the tool for EBP it is published so should not have an issue. If he wants to speak further, he should call JHH education department."

Miki

-----Original Message-----

From: moses ikejiofor <ugostacy@yahoo.com>

Sent: Friday, May 29, 2020 11:20 AM

To: Mary Rosenberger <mrosen55@jhu.edu>

Subject: Thank you

Hi Ms. Rosenberg, M.,

My name is Moses Ikejiofor. It was nice speaking with you this morning. I am a Doctor of Nursing practice (DNP) student at the Walden University School of Nursing. I am currently writing my DNP project. I want to ask your permission to reference the Johns Hopkins Evidence-based grading guidelines that I intend to use in my DNP project.

Thanks so much for your time to listen to my request. My email address is ugostacy@yahoo.com.

My phone number is 443-858-3581. Once again, I am deeply grateful.

Sincerely,

Moses Ikejiofor.

Appendix C: Johns Hopkins Nursing Evidence-Based Practice Non-Research

Evidence Appraisal Tool

Evidence Level & Quality: _____

Article Title:		Number:	
Author(s):		Publication Date:	
Journal:			
Does this evidence address the EBP question?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Do not proceed with appraisal of this evidence
<p>Clinical Practice Guidelines: Systematically developed recommendations from nationally recognized experts based on research evidence or expert consensus panel. LEVEL IV</p> <p>Consensus or Position Statement: Systematically developed recommendations based on research and nationally recognized expert opinion that guides members of a professional organization in decision-making for an issue of concern. LEVEL IV</p>			
<ul style="list-style-type: none"> • Are the types of evidence included identified? • Were appropriate stakeholders involved in the development of recommendations? • Are groups to which recommendations apply and do not apply clearly stated? • Have potential biases been eliminated? • Were recommendations valid (reproducible search, expert consensus, independent review, current, and level of supporting evidence identified for each recommendation)? • Were the recommendations supported by evidence? • Are recommendations clear? 	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> No
<p>Literature Review: Summary of published literature without systematic appraisal of evidence quality or strength. LEVEL V</p>			
<p>Is subject matter to be reviewed clearly stated?</p> <p>Is relevant, up-to-date literature included in the review (most sources within last 5 years or classic)?</p> <p>Is there a meaningful analysis of the conclusions in the literature?</p> <p>Are gaps in the literature identified?</p> <p>Are recommendations made for future practice or study?</p>			

Expert Opinion: Opinion of one or more individuals based on clinical expertise. LEVEL V		
<ul style="list-style-type: none"> • Has the individual published or presented on the topic? • Is author's opinion based on scientific evidence? • Is the author's opinion clearly stated? • Are potential biases acknowledged? 		

Organizational Experience: Quality Improvement: Cyclical method to examine organization-specific processes at the local level. LEVEL V Financial Evaluation: Economic evaluation that applies analytic techniques to identify, measure, and compare the cost and outcomes of two or more alternative programs or interventions. LEVEL V Program Evaluation: Systematic assessment of the processes and/or outcomes of a program and can involve both quantitative and qualitative methods. LEVEL V		
g:	Sample (composition/size):	
<ul style="list-style-type: none"> • Was the aim of the project clearly stated? • Was the method adequately described? • Were process or outcome measures identified? • Were results adequately described? • Was interpretation clear and appropriate? • Are components of cost/benefit analysis described? 	<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> N/A
Case Report: In-depth look at a person, group, or other social unit. LEVEL V		
<ul style="list-style-type: none"> • Is the purpose of the case report clearly stated? • Is the case report clearly presented? • Are the findings of the case report supported by relevant theory or research? • Are the recommendations clearly stated and linked to the findings? 		

Community Standard: Clinician Experience, or Consumer Preference			
Community Standard: Current practice for comparable settings in the community LEVEL V			
Clinician Experience: Knowledge gained through practice experience LEVEL V			
Consumer Preference: Knowledge gained through life experience LEVEL V			
Information Source(s):		Number of Sources:	
<ul style="list-style-type: none"> • Source of information has credible experience. • Opinions are clearly stated. • Identified practices are consistent. 		<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> No <input type="checkbox"/> N/A
Findings that help you answer the EBP question:			

QUALITY RATING FOR CLINICAL PRACTICE GUIDELINES, CONSENSUS OR POSITION STATEMENTS (LEVEL IV)

A High quality: Material officially sponsored by a professional, public, private organization, or government agency; documentation of a systematic literature search strategy; consistent results with sufficient numbers of well-designed studies; criteria-based evaluation of overall scientific strength and quality of included studies and definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years.

B Good quality: Material officially sponsored by a professional, public, private organization, or government agency; reasonably thorough and appropriate systematic literature search strategy; reasonably consistent results, sufficient numbers of well-designed studies; evaluation of strengths and limitations of included studies with fairly definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years.

C Low quality or major flaws: Material not sponsored by an official organization or agency; undefined, poorly defined, or limited literature search strategy; no evaluation of strengths and limitations of included studies, insufficient evidence with inconsistent results, conclusions cannot be drawn; not revised within the last 5 years.

QUALITY RATING FOR ORGANIZATIONAL EXPERIENCE (LEVEL V)

A High quality: Clear aims and objectives; consistent results across multiple settings; formal quality improvement or financial evaluation methods used; definitive conclusions; consistent recommendations with thorough reference to scientific evidence

B Good quality: Clear aims and objectives; formal quality improvement or financial evaluation methods used; consistent results in a single setting; reasonably consistent recommendations with some reference to scientific evidence

C Low quality or major flaws: Unclear or missing aims and objectives; inconsistent results; poorly defined quality improvement/financial analysis method; recommendations cannot be made

QUALITY RATING FOR LITERATURE REVIEW, EXPERT OPINION, COMMUNITY STANDARD, CLINICIAN EXPERIENCE, CONSUMER PREFERENCE (LEVEL V)

A High quality: Expertise is clearly evident; draws definitive conclusions; provides scientific rationale; thought leader in the field

B Good quality: Expertise appears to be credible; draws fairly definitive conclusions; provides logical argument for opinions

C Low quality or major flaws: Expertise is not discernable or is dubious; conclusions cannot be drawn

Appendix D: Johns Hopkins Nursing Evidence-Based Practice Research Evidence

Appraisal Tool

Evidence level and quality rating:	
Article title:	Number:
Author(s):	Publication date:
Journal:	
Setting:	Sample (composition and size):
Does this evidence address my EBP question? Yes No- <i>Do not proceed with appraisal of this evidence</i>	

Is this study:

Quantitative (collection, analysis, and reporting of numerical data)

Measurable data (how many; how much; or how often) used to formulate facts, uncover patterns in research, and generalize results from a larger sample population; provides observed effects of a program, problem, or condition, measured precisely, rather than through researcher interpretation of data. Common methods are surveys, face-to-face structured interviews, observations, and reviews of records or documents. Statistical tests are used in data analysis.

➡ Go to **Section I: Quantitative**

Qualitative (collection, analysis, and reporting of narrative data)

Rich narrative documents are used for uncovering themes; describes a problem or condition from the point of view of those experiencing it. Common methods are focus groups, individual interviews

(unstructured or semi structured), and participation/ observations. Sample sizes are small and are

determined when data saturation is achieved. Data saturation is reached when the researcher identifies that no new themes emerge, and redundancy is occurring. Synthesis is used in data analysis. Often a

starting point for studies when little research exists; may use results to design empirical studies. The researcher describes, analyzes, and interprets reports, descriptions, and observations from participants.

➡ Go to **Section I I: Qualitative**

Mixed methods (results reported both numerically and narratively)

Both Quantitative and Qualitative methods are used in the study design. Using both approaches, in combination, provides a better understanding of research problems than using either approach alone. Sample sizes vary based on methods used. Data collection involves collecting and analyzing both Quantitative and Qualitative data in a single study or series of studies.

Interpretation is continual and can influence stages in the research process.

➡ Go to **Section I I I: Mixed Methods**

Research Evidence Appraisal Tool

Section I: Quantitative		
Level of Evidence (Study Design)		
A	Is this a report of a single research study?	<input type="radio"/> Yes <input type="radio"/> No Go to C
	1. Was there manipulation of an independent variable?	<input type="radio"/> Yes <input type="radio"/> No
	2. Was there a control group?	<input type="radio"/> Yes <input type="radio"/> No
	3. Were study participants randomly assigned to the intervention and control groups?	<input type="radio"/> Yes <input type="radio"/> No
If Yes to questions 1, 2, and 3 , this is a <u>randomized controlled trial (RCT) or experimental study</u> .		LEVEL I
If Yes to questions 1 and 2 and No to question 3 or Yes to question 1 and No to questions 2 and 3 , this is <u>quasi-experimental</u> . (Some degree of investigator control, some manipulation of an independent variable, lacks random assignment to groups and may have a control group).		LEVEL II
If No to questions 1, 2, and 3 , this is <u>nonexperimental</u> . (No manipulation of independent variable; can be descriptive, comparative, or correlational; often uses secondary data).		LEVEL III

Study Findings That Help Answer the EBP Question

Skip to the **Appraisal of Quantitative Research Studies** section

Research Evidence Appraisal Tool

Section I: Quantitative (continued)

B Is this a summary of multiple sources of research evidence? Is this a summary of multiple sources of research?	<input type="radio"/> Yes <i>Continue</i>	<input type="radio"/> No Use Appendix C
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1. Does it employ a comprehensive search strategy and rigorous appraisal method? If this study includes research, nonresearch, and experiential evidence, it is an integrative review (see Appendix C).	<input type="radio"/> Yes <i>Continue</i>	<input type="radio"/> No Use Appendix C
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2. For systematic reviews and systematic reviews with meta-analysis (see descriptions below):

a. Are all studies included RCTs?	LEVEL I
b. Are the studies a combination of RCTs and quasi-experimental, or quasi-experimental only?	LEVEL II
c. Are the studies a combination of RCTs, quasi-experimental, and nonexperimental, or non-experimental only?	LEVEL III

A **systematic review** employs a search strategy and a rigorous appraisal method but does not generate an effect size.

A **meta-analysis**, or systematic review with meta-analysis, combines and analyzes results from studies to generate a new statistic: the effect size.

Study Findings That Help Answer the EBP Question

Skip to the Appraisal of Systematic Review (With or Without a Meta-Analysis) section

Research Evidence Appraisal Tool

Appraisal of Quantitative Research Studies

Does the researcher identify what is known and not known about the problem and how the study will address any gaps in knowledge?	<input type="radio"/>	Yes	<input type="radio"/>	No	
Was the purpose of the study clearly presented?	<input type="radio"/>	Yes	<input type="radio"/>	No	
Was the literature review current (most sources within the past five years or a seminal study)?	<input type="radio"/>	Yes	<input type="radio"/>	No	
Was sample size sufficient based on study design and rationale?	<input type="radio"/>	Yes	<input type="radio"/>	No	
If there is a control group: • Were the characteristics and/ or demographics similar in both the control and intervention groups?	<input type="radio"/>	Yes	<input type="radio"/>	No	N/ A
• If multiple settings were used, were the settings similar?	<input type="radio"/>	Yes	<input type="radio"/>	No	N/ A
• Were all groups equally treated except for the intervention group(s)?	<input type="radio"/>	Yes	<input type="radio"/>	No	N/ A

Are data collection methods described clearly?	<input type="radio"/> Yes	<input type="radio"/> No	
Were the instruments reliable (Cronbach's α [alpha] \geq 0.70)?	<input type="radio"/> Yes	<input type="radio"/> No	N/ A
Was instrument validity discussed?	<input type="radio"/> Yes	<input type="radio"/> No	N/ A
If surveys or questionnaires were used, was the response rate \geq 25%?	<input type="radio"/> Yes	<input type="radio"/> No	N/ A
Were the results presented clearly?	<input type="radio"/> Yes	<input type="radio"/> No	
If tables were presented, was the narrative consistent with the table content?	<input type="radio"/> Yes	<input type="radio"/> No	N/ A
Were study limitations identified and addressed?	<input type="radio"/> Yes	<input type="radio"/> No	
Were conclusions based on results?	<input type="radio"/> Yes	<input type="radio"/> No	
Complete the <u>Quality Rating for Quantitative Studies</u> section			

Research Evidence Appraisal Tool

Appraisal of Systematic Review (With or Without Meta- Analysis)		
Were the variables of interest clearly identified?	<input type="radio"/> Yes	<input type="radio"/> No
Was the search comprehensive and reproducible?	<input type="radio"/> Yes	<input type="radio"/> No
• Key search terms stated	<input type="radio"/> Yes	<input type="radio"/> No
• Multiple databases searched and identified	<input type="radio"/> Yes	<input type="radio"/> No

• Inclusion and exclusion criteria stated	<input type="radio"/> Yes	<input type="radio"/> No
Was there a flow diagram that included the number of studies eliminated at each level of review?	<input type="radio"/> Yes	<input type="radio"/> No
Were details of included studies presented (design, sample, methods, results, outcomes, strengths, and limitations)?	<input type="radio"/> Yes	<input type="radio"/> No
Were methods for appraising the strength of evidence (level and quality) described?	<input type="radio"/> Yes	<input type="radio"/> No
Were conclusions based on results?	<input type="radio"/> Yes	<input type="radio"/> No
• Results were interpreted	<input type="radio"/> Yes	<input type="radio"/> No
• Conclusions flowed logically from the interpretation and systematic review question	<input type="radio"/> Yes	<input type="radio"/> No
Did the systematic review include a section addressing limitations <u>and?</u> how they were addressed?	<input type="radio"/> Yes	<input type="radio"/> No

Complete the Quality Rating for Quantitative Studies section (below)

Quality Rating for Quantitative Studies

Circle the appropriate quality rating below:

A High quality: Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence.

B Good quality: Reasonably consistent results; sufficient sample size for the study design; some control, and fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence.

C Low quality or major flaws: Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn.

Research Evidence Appraisal Tool

Section I I: Qualitative		
Level of Evidence (Study Design)		
A Is this a report of a single research study?	<input type="radio"/> Yes this is Level III	<input type="radio"/> No go to I I B
Study Findings That Help Answer the EBP Question		
Complete the <u>Appraisal of Single Qualitative Research Study</u> section (below)		

Appraisal of a Single Qualitative Research Study		
Was there a clearly identifiable and articulated:		
• Purpose?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Research question?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Justification for method(s) used?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Phenomenon that is the focus of the research?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Were study sample participants representative?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did they have knowledge of or experience with the research area?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Were participant characteristics described?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Was sampling adequate, as evidenced by achieving saturation of data?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Data analysis:		
• Was a verification process used in every step by checking and confirming with participants the trustworthiness of analysis and interpretation?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Was there a description of how data were analyzed (i.e., method), by computer or manually?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Do findings support the narrative data (quotes)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Do findings flow from research question to data collected to analysis undertaken?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Are conclusions clearly explained?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Skip to the <u>Quality Rating for Qualitative Studies</u> section		

Research Evidence Appraisal Tool

B: For summaries of multiple qualitative research studies (meta-synthesis), was a comprehensive search strategy and rigorous appraisal method used?	oYes Level I II	oNo go to Appendix D
Study Findings That Help Answer the EBP Question		
Complete the <u>Appraisal of Meta- Synthesis Studies</u> section (below)		

Appraisal of Meta- Synthesis Studies		
Were the search strategy and criteria for selecting primary studies clearly defined?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Were findings appropriate and convincing?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Was a description of methods used to:		
• Compare findings from each study?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Interpret data?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did synthesis reflect:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

• New insights?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Discovery of essential features of phenomena?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• A fuller understanding of the phenomena?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Was sufficient data presented to support the interpretations?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Complete the Quality Rating for Qualitative Studies section (below)		

Quality Rating for Qualitative Studies

Circle the appropriate quality rating below:

No commonly agreed-on principles exist for judging the quality of Qualitative studies. It is a subjective process based on the extent to which study data contributes to synthesis and how much information is known about the researchers' efforts to meet the appraisal criteria.

For meta-synthesis, there is preliminary agreement that quality assessments should be made before synthesis to screen out poor-quality studies¹.

A/B High/Good quality is used for single studies and meta-syntheses².

The report discusses efforts to enhance or evaluate the quality of the data and the overall inquiry in sufficient detail; and it describes the specific techniques used to enhance the quality of the inquiry.

Evidence of some or all of the following is found in the report:

- **Transparency:** Describes how information was documented to justify decisions, how data were reviewed by others, and how themes and categories were formulated.
- **Diligence:** Reads and rereads data to check interpretations; seeks opportunity to find multiple sources to corroborate evidence.
- **Verification:** The process of checking, confirming, and ensuring methodologic coherence.
- **Self-reflection and self-scrutiny:** Being continuously aware of how a researcher's experiences, background, or prejudices might shape and bias analysis and interpretations.
- **Participant-driven inquiry:** Participants shape the scope and breadth of questions; analysis and interpretation give voice to those who participated.
- **Insightful interpretation:** Data and knowledge are linked in meaningful ways to relevant literature.

C Lower-quality studies contribute little to the overall review of findings and have few, if any, of the features listed for High/Good quality.

1

https://www.york.ac.uk/crd/SysRev/!SSL!/WebHelp/6_4_ASSESSMENT_OF_QUALITATIVE_RESEARCH.htm 2 Adapted from Polit & Beck (2017).

Research Evidence Appraisal Tool

Section I I I: Mixed Methods		
Level of Evidence (Study Design)		
You will need to appraise both the Quantitative and Qualitative parts of the study independently, before appraising the study in its entirety.		
1. Evaluate the Quantitative part of the study using Section I .	Level	Quality
Insert here the level of evidence and overall quality for this part:		
2. Evaluate the Qualitative part of the study using Section I .	Level	Quality
Insert here the level of evidence and overall quality for this part:		
3. To determine the level of evidence, circle the appropriate study design:		
<ul style="list-style-type: none"> • Explanatory sequential designs collect Quantitative data first, followed by the Qualitative data; and their purpose is to explain Quantitative results using Qualitative findings. The level is determined based on the level of the Quantitative part. • Exploratory sequential designs collect Qualitative data first, followed by the Quantitative data; and their purpose is to explain Qualitative findings using the Quantitative results. The level is determined based on the level of the Qualitative part, and it is always Level I I I. • Convergent parallel designs collect the Qualitative and Quantitative data concurrently for the purpose of providing a more complete understanding of a phenomenon by merging both datasets. These designs are Level I I I. • Multiphasic designs collect Qualitative and Quantitative data over more than one phase, with each phase informing the next phase. These designs are Level I I I. 		
Study Findings That Help Answer the EBP Question		

Complete the Appraisal of Mixed Methods Studies section (below)

Johns Hopkins Nursing Evidence-Based Practice
Research Evidence Appraisal Tool

Appraisal of Mixed Methods Studies³

Was the mixed-methods research design relevant to address the Quantitative and Qualitative research questions (or objectives)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Was the research design relevant to address the Quantitative and Qualitative aspects of the mixed-methods question (or objective)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
For convergent parallel designs, was the integration of Quantitative and Qualitative data (or results) relevant to address the research question or objective?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
For convergent parallel designs, were the limitations associated with the integration (for example, the divergence of Qualitative and Quantitative data or results) sufficiently addressed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

Complete the Quality Rating for Mixed- Method Studies section (below)

3 National Collaborating Centre for Methods and Tools. (2015). Appraising Qualitative, Quantitative, and Mixed Methods Studies included in Mixed Studies Reviews: The MMAT. Hamilton, ON: McMaster University. (Updated 20 July 2015).
<http://www.nccmt.ca/resources/search/232>

Quality Rating for Mixed-Methods Studies

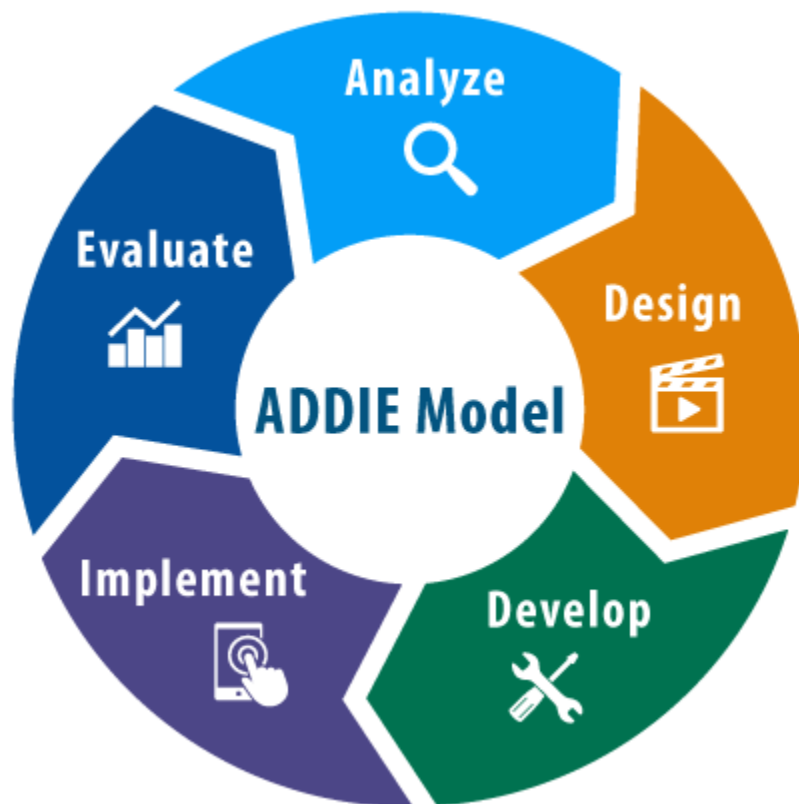
Circle the appropriate quality rating below

A **High quality:** Contains high-quality Quantitative and Qualitative study components; highly relevant study design; relevant integration of data or results; and careful consideration of the limitations of the chosen approach.

B **Good quality:** Contains good-quality Quantitative and Qualitative study components; relevant study design; moderately relevant integration of data or results; and some discussion of limitations of integration.

C **Low quality or major flaws:** Contains low quality Quantitative and Qualitative study components; study design not relevant to research questions or objectives; poorly integrated data or results; and no consideration of limits of integration.

Appendix E: The 5-Stepwise Process of the ADDIE Model



Centers for Disease Control and Prevention (CDC). (2019). Public health education and training development: ADDIE Model

Appendix F: Curriculum Plan

Title of Project: Educating Staff Nurses on Opioid Use Disorder (OUD)

Student: Moses Ikejiofor, CRNP-PMH, DNP-Student

Problem: The problem identified in this DNP project is the lack of nurses' knowledge of OUD and the potential impact this lack of knowledge might have on the nurses' care and attitudes toward patients with the diagnosis.

Purpose: The purpose of this project is to plan and evaluate a staff education program on opiate addiction (SEPOUD) to increase the knowledge of nurses, as evidenced by a change in knowledge in a pretest/posttest situation.

Practice Focused Question(s): (a) What evidence in the literature shows that nurses lack knowledge about OUD? (b) What evidence in the literature supports that educating nurses regarding OUD can bring a change in knowledge?

Administration of Pretest				
Objective Number and Statement	<i>Detailed Content Outline</i>	Evidence (from Literature Review Matrix)	Method of Presenting	Method of Evaluation P/P Item
1. Participants will be able to describe opioid use disorder and its impacts on	<p><i>a. What is OUD:</i></p> <ul style="list-style-type: none"> ➤ <i>Chronic brain disease with high potential for relapse</i> ➤ <i>Causes dysregulation of the</i> 	<p>Umberger & Gaddis, 2020; Volkow, 2020; Wang et al., 2019; Worley, 2019.</p> <p>Compton & Blacher, 2020</p> <p>National Institute of Drug Abuse</p>	PowerPoint	<p>Pretest/Posttest Items</p> <p>Question #1</p> <p>Question #2</p>

<p>health, life, and economy.</p>	<p><i>healthy brain structure and function, leading to the 4 Cs of behavior, loss of control of, craving for, continued use, impulsive and compulsive use of opioids despite their adverse consequences.</i></p> <ul style="list-style-type: none"> ➤ <i>Involves changes in brain pathway involved in reward, stress and learning for a long time.</i> ➤ <i>Neurobiological Effects: Genetic factor contributes to substance use disorder.</i> <p><i>b. The Problem of OUD on Health, Life, and Economy</i></p> <ul style="list-style-type: none"> ➤ <i>Associated with depression, anxiety, problem with sleep,</i> 	<p>(NIDA, 2019)</p>		<p>Question #3</p> <p>Question # 8</p>
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	<p><i>decline in physical and emotional well-being, low self-esteem, and diminished social interaction.</i></p> <p><i>Economic Impact:</i></p> <ul style="list-style-type: none"> ➤ <i>Increase in health care usage!</i> ➤ <i>National expenditure on Opioid epidemic between \$172 billion and \$214 billion in 2019.</i> ➤ <i>Approx. \$78.5 billion/year</i> ➤ <i>Approx. 80% of heroin users began with prescription opioids.</i> ➤ <i>Approx. 130 people die/day from prescription Opioid.</i> <p><i>c. Association of OUD and co-occurring mental health disorders</i></p> <ul style="list-style-type: none"> ➤ <i>Depression disorder, generalized anxiety,</i> 			
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	<i>Insomnia, and pain.</i>			
2. Participants will be able to describe changes in brain structure and functions related to OUD	<p>a. The Science of OUD</p> <ul style="list-style-type: none"> ➤ Effects of Opioid to brain structure and function ➤ The neurobiology, and genetic risk factors of OUD ➤ Dopamine is the primary neurotransmitter. ➤ Activation of reward system leading to increase in Dopamine in ventral teg-mental and prefrontal cortex of the brain. ➤ Brain attempts to maintain balance by decreasing the production of Dopamine. ➤ Decrease in Dopamine leads to emotional and behavioral changes including low mood, 	<p>Umberger & Gaddis, 2020; Volkow, 2020. Compton & Blacher, 2020</p>	PowerPoint	<p>Pretest/Posttest Items Question # 5 Questions #6: Question #7</p>

	<p>low motivation, lack of enjoyment, impulsiveness, poor decision- making.</p> <ul style="list-style-type: none"> ➤ Leads to a continued use of Opioid to feel better. <p>b. Medication-Assisted Treatment (MAT)</p> <ul style="list-style-type: none"> ➤ MAT are MU-Opioid partial agonists, or antagonist are medications used to reduce or block cravings for opioids. ➤ Examples of MAT Suboxone [Buprenorphine (agonist) and Naloxone (antagonist)] and Methadone. 			
3. Participants will identify at least two negative attitudes and	<p>Lack of Nurses' Education about Neurobiology of OUD</p> <ul style="list-style-type: none"> ➤ 53% Americans attribute addiction to disease while 44% 	Smentkowski, 2019; Costello & Thompson, 2015; Umberger & Gaddis, 2020; Volkow, 2020; Pickard, 2017; ANA, 2018; CDC, 2017; NIDA, 2019; Kulesza et al.,	PowerPoint	Pretest/Posttest Items Question # 4 Question # 9

<p>their impacts on nursing care of patients addicted to opioids.</p>	<p>say addiction. is indicative of lack of a person's willpower or discipline (Umberger & Gaddis, 2020).</p> <ul style="list-style-type: none"> ➤ Nurses lack education about OUD and training in treating OUD patients. ➤ Negative attitudes and biases toward OUD patients: stigmatization, stereotyping, diminished nurse- patient interaction, stereotyping, delayed response to pain, and diminished empathy and compassion. ➤ Creates barriers to diagnosis, treatment, and recovery in patients with OUD. ➤ Leading to suboptimal care and poor patient 	<p>2016; Winsper et al., 2020</p>		
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	outcome			
4. Participants will be able to state at least two benefits of educating nurses about Opioid use disorder.	<p>a. Importance of Educating Nurses about OUD</p> <ul style="list-style-type: none"> ➤ Improve nurses' knowledge of the neurobiology of OUD. ➤ Change negative attitudes and biases. ➤ Facilitates responsibility, commitment, and compassion in providing care to OUD patients. ➤ Improve the care of patients. ➤ Promote positive social change. <p>b. Understanding Positive Social Change</p> <ul style="list-style-type: none"> ➤ “deliberate process of creating and applying ideas, strategies, and actions to promote the worth, dignity, and development of 	Smentkowski, 2019; Costello & Thompson, 2015; Worley, 2019; Kulesza et al., 2016; Walden University, 2019, p. 15.	PowerPoint	Pretest/Posttest Items Question # 10

	<p>individuals, communities, organizations, institutions, cultures, and societies” (Walden University, 2019, p. 15).</p> <ul style="list-style-type: none"> ➤ Compassionate care promotes a feeling of empowerment, instills hope in OUD patients, ➤ Improves patients’ human and social conditions, including their families, and the community 			
<p>5. Participants will be able to state at least two ways to improve nurse-patient interpersonal relationship with OUD patients, patients’</p>	<p>a. Improving Nurse-Patient Relationship</p> <ul style="list-style-type: none"> ➤ Use of empathy and compassion. ➤ Changing personal biases and negative attitudes ➤ Empowering patient ➤ Encouraging social support ➤ Treating patient with 	<p>Pickard, 2017; Costello & Thompson; Kulesza et al., 2016; Worley, 2019; Winsper et al., 2020; Walden University, 2019, p. 15.</p>	<p>PowerPoint</p>	<p>Pretest/Posttest Item Question # 4</p>

adherence and quality of care.	respect and dignity ➤ Acknowledge the patient's disease process and be responsive to patient's care needs.			
Administration of Posttest				

Moon/May 2020

Appendix G: Curriculum Plan Evaluation by Content Experts

Date: 11/30/20**Student:** Moses E. Ikejiofor**Respondent ID:****Products for Review:** Curriculum Plan, Complete Curriculum Content, Literature

Review Matrix

Instructions: Please review each objective related to the curriculum plan, content, and matrix. The answer will be a *met* or *not met* with comments if there is a problem understanding the content or if the content does not speak to the objective.

Objective Number	Objective Statement	Met	Not Met	Comment
	At the conclusion of this educational experience, the participant will be able to:			
1	describe opioid use disorder and its impacts on health, life, and economy.			
2	describe changes in brain structure and functions related to OUD.			
3	identify at least two negative attitudes and their impacts on nursing care of patients addicted to opioids.			
4	state at least two benefits of educating nurses about Opioid use disorder.			

5	state at least two ways to improve nurse-patient interpersonal relationship with OUD patients, patients' adherence, and quality of care.			
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Moon/May 2020

Appendix H: Curriculum Plan Evaluation by Content Experts Summary

Met = 1 Not Met = 2

At the conclusion of this educational experience, learners will be able to:

Objective Number	Objective Statement	CE-A		CE-B		CE-C		Average Score
		Met	Not Met	Met	Not Met	Met	Not Met	
1	Participants will be able to describe opioid use disorder and its impacts on health, life, and economy							
2	Participants will be able to describe changes in brain structure and functions related to OUD							
3	Participants will identify at least two negative attitudes and their impacts on nursing care of							

	patients addicted to opioids.							
4	Participants will be able to state at least two benefits of educating nurses about Opioid use disorder.							
5	Participants will be able to state at least two ways to improve nurse-patient interpersonal relationship with OUD patients, patients' adherence and quality of care.							

Moon/August 2019

Appendix I: Pretest/Posttest

Pretest/ Posttest: Educating Staff Nurses on Opioid Use Disorder

Student Name: Moses Ikejiofor, CRNP-PMH, DNP Student

Date: 11/30/20

- 1.** According to the Compton and Blacher (2020), what is the average number of people in the United States who die of opioid overdose per day?
 - a. 80
 - b. 100
 - c. 125
 - d. 130 *

- 2.** According to the National Institute of Drug Abuse (NIDA, 2019), what is the estimated average dollar amount per year spent on patients' care for issues relating to prescription opioid abuse?
 - a. \$78.5 billion/year *
 - b. \$100.0 billion/year
 - c. \$78.5 million/year
 - d. \$100.0 million/year

- 3.** According to the National Institute of Drug Abuse (NIDA, 2019), what percentage individuals who abuse heroin began with abusing prescription opioids?
 - a. 30%
 - b. 40%
 - c. 50%
 - d. 80% *

4. In the literature, Kulesza et al. (2016), Smentkowski (2019) and Worley (2019) showed that nurses exhibit the following negative attitudes toward patients with opioid use disorder **EXCEPT**.
- Stigmatization and stereotyping
 - Diminished interaction and delayed response to pain medication
 - Increased patient advocacy and interaction*
 - Lack of empathy and compassion
5. What are two examples of medication assisted treatment?
- Percocet and Buprenorphine
 - Percocet and Tylenol
 - Naloxone and Buprenorphine *
 - Naloxone and Tylenol
6. What is the primary neurotransmitter responsible for opioid use disorder?
- Norepinephrine
 - Dopamine *
 - Serotonin
 - Gamma aminobutyric acid (GABA)
 - None of the Above
7. According to Worley (2019), which of the following statements about the frequent use of opioids is(are) true?
- The reward system in the ventral teg-mental and prefrontal cortex of the brain causes an increase in Dopamine and Serotonin.
 - Activation of negative feedback and dysregulation causes a decrease of Serotonin and an increase in Dopamine level in the brain.
 - An increase in dopamine causes low mood, low motivation, lack of enjoyment, impulsiveness, and poor decision making, rather than moral failure or choice.
 - A and C
 - None of the above*

- 8. True or False:** According to Umberger and Gaddis (2020), patients who have opioid use disorders are susceptible to depression, anxiety, insomnia, impaired social interaction, social isolation, and low self-worth.
- True *
 - False
- 9. True or False:** According to Umberger and Gaddis (2020), about 53% Americans attribute addiction to disease while 44% say addiction is indicative of lack of a person's willpower or discipline.
- True *
 - False
- 10. True or False:** In the literature, Umberger and Gaddis (2020), Volkow (2020), opioid use disorder is more of a behavior induced condition than a neurobiological disease.
- True
 - False *

Appendix J: Pretest/Posttest Content Validation by CEs

Title of Project: Educating Staff Nurses on Opioid Use Disorder

Student: Moses E. Ikejiofor

Respondent No. (A, B, C):

Accompanying Packet: Curriculum Plan, Pretest/Posttest with answers, Pretest/Posttest Expert Content Validation Form.

INSTRUCTIONS: Please check each item to see if the question is representative of the course objective and the correct answer is reflected in the course content.

Test Item #

1 Not Relevant ___ Somewhat Relevant___ Relevant___ Very Relevant___

Comments:

2 Not Relevant___ Somewhat Relevant___ Relevant___ Very Relevant___

Comments:

3 Not Relevant___ Somewhat Relevant___ Relevant___ Very Relevant___

Comments:

4 Not Relevant___ Somewhat Relevant___ Relevant___ Very Relevant___

Comments:

5. Not Relevant___ Somewhat Relevant___ Relevant___ Very Relevant___

Comments:

6. Not Relevant___ Somewhat Relevant___ Relevant Very Relevant___

Comments:

7. Not Relevant__ Somewhat Relevant__ Relevant Very Relevant__

Comments:

8. Not Relevant__ Somewhat Relevant__ Relevant Very Relevant__

Comments:

9. Not Relevant__ Somewhat Relevant__ Relevant Very Relevant__

Comments:

10. Not Relevant__ Somewhat Relevant__ Relevant Very Relevant__

Comments:

Moon/August 2019

Appendix K: Summary Evaluation of the Staff Education Project by Content

Experts

Title of Project: Educating Staff Nurses on Opioid Use Disorder

Student: Moses Ikejiofor

Thank you for completing the Summary Evaluation on my project. Please complete and send anonymously via interoffice mail to:

- I. This project was a team approach with the student as the team leader.
 - a. Please describe the effectiveness (or not) of this project as a team approach related to meetings, communication, and desired outcomes etc.
 - b. How do you feel about your involvement as a stakeholder/committee member?
 - c. What aspects of the committee process would you like to see improved?
- II. There were outcome products involved in this project including an educational curriculum for ICU nurses and pre/ posttest.
 - a. Describe your involvement in participating in the development/approval of the products.
 - b. Share how you might have liked to have participated in another way in developing the products.
- III. The role of the student was to be the team leader.
 - a. As a team leader how did the student direct the team to meet the project goals?
 - b. How did the leader support the team members in meeting the project goals?

Please offer suggestions for improvement.

Appendix L: Summary Evaluation Results of the Staff Education Project by
Content Experts

Title of Project: Educating Staff Nurses on Opioid Use Disorder

Student: Moses E. Ikejiofor

Student Instructions: Compile all comments made by the respondents in the table below and analyze and synthesize your findings.

IV. This project was a

a. Please describe the effectiveness (or not) of this project as related to communication, and desired outcomes etc.

Evaluator A	Evaluator B	Evaluator C
The project is relevant	The project is needed	The project is timely

b. How do you feel about your involvement as a stakeholder/committee member?

Evaluator A	Evaluator B	Evaluator C
"I enjoyed being asked to evaluate project"	"I enjoyed the opportunity to evaluate the project"	"I am honored being a CE"

c. What aspects of the committee process would you like to see improved?

Evaluator A	Evaluator B	Evaluator C
"None"	"None"	"The project is well organized"

V. There were outcome products involved in this project including an educational curriculum for ICU nurses and pre/ posttest.

c. Describe your involvement in participating in the development/approval of the products.

Evaluator A	Evaluator B	Evaluator C
"I enjoyed being asked to evaluate project"	"I enjoyed the opportunity to evaluate the project"	"I am honored being a CE"

d. Share how you might have liked to have participated in another way in developing the products.

Evaluator A	Evaluator B	Evaluator C
"I enjoyed being asked to evaluate project"	"I enjoyed the opportunity to evaluate the project"	"I liked being a CE"

VI. The role of the student was to be the team leader.

a. As a team leader how did the student direct the team to meet the project goals?

Evaluator A	Evaluator B	Evaluator C
"He is respectful"	"Project leader is communicative"	"He is professional"

b. How did the leader support the team members in meeting the project goals?

Evaluator A	Evaluator B	Evaluator C

"He is respectful"	Project leader is communicative"	"He is professional"
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VII. Please offer suggestions for improvement.

Evaluator A	Evaluator B	Evaluator C
"I hope the project outcomes are shared with staff and patients in other settings"	"I think the project is adequate"	"Nurses and patients of healthcare settings would benefit from this project"

Moon/May 2020

Appendix M: PowerPoint Presentation of Education Program to Participants

Educating Staff Nurses on Opioid Use Disorder

Moses Ikejiofor, BSN, MSN, DNP-Student CRNP-PMH

Educating Staff Nurses on Opioid Use Disorder

December 31, 2020

Moses Ikejiofor, BSN, MSN, DNP-Student CRNP-PMH

Welcome

- My name is Moses Ikejiofor.
 - I would like to thank:
 - Administration
 - All the Coordinator of this Project
 - All Staff Nurses, and all other Participants

Administration of Pretest

- Participation in the Pretest/Posttest is voluntary
- Do not write your name or identity in the pretest question paper.
- Attempt all the questions to the best of your ability.
- Put your completed pretest questions in the designated envelop.

Learning Objectives

- **At the conclusion of this educational experience, the participant will be able to:**
 - describe opioid use disorder and its impacts on health, life, and economy.
 - describe changes in brain structure and functions related to OUD.

- identify at least two negative attitudes and their impacts on nursing care of patients addicted to opioids.
- state at least two benefits of educating nurses about Opioid use disorder.
- state at least two ways to improve nurse-patient interpersonal relationship with OUD patients, patients' adherence, and quality of care.

Introduction

- **What is Opioid Use Disorder (OUD):**
 - Chronic brain disease with high potential for relapse
 - Characterized by a cycle of neurobiological processes and changes in the brain (Umberger & Gaddis, 2020; Volkow, 2020).
 - Causes dysregulation of the healthy brain structure and function, leading to the 4 Cs of behavior, loss of control of, craving for, continued use, impulsive and compulsive use of opioids despite their adverse consequences.
 - Involves changes in brain pathway involved in reward, stress and learning for a long time.
 - Neurobiological Effects: Genetic factor contributes to substance use disorder.

The Problem of OUD on Health, Life, and Economy

- **OUD is Associated with:**
 - Associated with depression, generalized anxiety, pain, problem with sleep, decline in physical and emotional well-being, low self-esteem, and diminished social interaction (Umberger & Gaddis, 2020).

➤ **Economic Impact:**

- Increase in health care usage.
- National expenditure on Opioid epidemic between \$172 billion and \$214 billion in 2019.
- The US spends approx. \$78.5 billion/year on OUD (NIDA, 2019).
- Approx. 80% of heroin users began with prescription opioids (NIDA, 2019).
- Approx. 130 people die/day from prescription Opioid (Compton & Blacher, 2020).

The Science of OUD

➤ **Risk Factors of OUD:**

- The neurobiology, and genetic risk factors

➤ **Effects of Opioid to Brain Structure and Function:**

- Dopamine is the primary neurotransmitter.
- Activation of reward system leads to increase in Dopamine in ventral tegmental and prefrontal cortex of the brain (Worley, 2019)
- The brain attempts to maintain balance by decreasing the production of Dopamine.
- The decrease in Dopamine leads to emotional and behavioral changes including low mood, low motivation, lack of enjoyment, impulsiveness, poor decision making (Worley, 2019)
- Leads to continued use of opioid to make the person feel better.

Medication-Assisted Treatment (MAT)

➤ What is Medication-Assisted Treatment:

- MAT are MU-Opioid partial agonists, or antagonist medications used to reduce or block cravings for opioids.
- Examples of MAT include Suboxone [Buprenorphine (agonist) and Naloxone (antagonist)] and Methadone.

Some Relevant Facts

- 53% Americans attribute addiction to disease while 44% say addiction is indicative of lack of a person's willpower or discipline (Umberger & Gaddis, 2020).
- Many nurses lack education about OUD and training in treating OUD patients (Umberger & Gaddis, 2020; Worley, 2019).
- Negative attitudes and biases toward OUD patients: stigmatization, stereotyping, diminished nurse-patient interaction, stereotyping, delayed response to pain, and diminished empathy and compassion (Kulesza et al., 2016; Smentkowski, 2019; Worley, 2019).
- The nurses' lack of knowledge of OUD creates barriers to diagnosis, treatment, and recovery in patients with OUD.
- Leads to suboptimal care and poor patient outcome.

Improving Nurse-Patient Relationship

- Use of empathy and compassion.
- Changing personal biases and negative attitudes

- Empowering patient
- Encouraging social support
- Treating patient with respect and dignity
- Acknowledge the patient's disease process and be responsive to patient's care needs.

Understanding Positive Social Change

- **Definition:**
 - “Deliberate process of creating and applying ideas, strategies, and actions to promote the worth, dignity, and development of individuals, communities, organizations, institutions, cultures, and societies (Walden University, 2019, p. 15)”
 - Facilitates responsibility, commitment, and compassion in providing care to OUD patients.
 - Improves the care of patients.
 - Promotes positive social change.
 - Compassionate care promotes a feeling of empowerment, instills hope in OUD patients.
 - Improves patients' human and social conditions, including their families, and the community.

Summary

- Opioid use disorder is a chronic neurobiological disease with risk of relapse and not a behavior induced condition.

- Causes dysregulation of the brain function resulting in alteration in behavior including loss of control of, craving for, continued use, impulsive and compulsive use of opioids despite their adverse consequences.
- OUD is associated with comorbidities including depression, anxiety, pain, and insomnia, low self-worth, and social isolation.
- Contributes to a rise in morbidity, mortality, and financial burden in the United States (US) economy.
- Nurses are in a unique position create positive social change. When nurses provide compassionate care to patients, empathetic, patients are most likely to be more motivated to comply with their plan of care, leading to the improvement in patients' condition, which is beneficial to the patient and patients' families, the organization as well as the nurses resulting to the creation of positive social change.

Closing Remarks

- Once again, thank you, the Administration, Coordinators of this educational program, and all the participants.
- At this point I would like to conclude my presentation, and happy to take your questions, if any.

End.

Administration of Posttest Questions

- The posttest questions are voluntary.

- Do not write your names or identity in the posttest question paper to insure anonymity.
- Attempt all the questions to the best of your ability.
- Put your completed posttest questions in the designated envelope.

Appendix N: Evaluation of the Staff Education Program by Participants

Objective Statement	Were the objectives met? Please circle.	Comments
1. Participants will be able to describe opioid use disorder and its impacts on health, life, and economy.	Yes No	
2. Participants will be able to describe changes in brain structure and functions related to OUD.	Yes No	
3. Participants will identify at least two negative attitudes and their impacts on nursing care of patients addicted to opioids.	Yes No	
4. Participants will be able to state at least two benefits of educating nurses about Opioid use disorder.	Yes No	

5. Participants will be able to state at least two ways to improve nurse-patient interpersonal relationship with OUD patients, patients' adherence, and quality of care.	Yes No	
Additional Comments:		

Moon/May 2020

Appendix O: Letter to CEs (CE) and Instructions for Packet for CEs

12/02/20

Dear Content Expert,

Thank you for agreeing to volunteer as a Content Expert for my Doctor of Nursing project entitled, *Educating Staff Nurses on Opioid Use Disorder*. In the enclosed packet, you will find five documents for your review along with this letter. The instructions for completing the materials are indicated at the top of each document on which a numeric number has been assigned to ensure the anonymity of your identity. As well, the documents have been mailed to you by a person other than me to maintain anonymity. After completing the packet, please put the materials in the enclosed envelope, which has both your return address and the address of the person in charge of disbursing and collecting the information, who will place materials in a new envelope with no identifiers and deliver them to me. Please, feel free to contact me at any time via my phone or email, which are listed below. If you have a need to contact my faculty member, Dr. Joan Moon, please do so at joan.moon@mailwaldenu.edu or 419-308-3714.

Contents of Packet:

- i. Letter of introduction
- ii. Literature Review Matrix
- iii. Curriculum Plan
- iv. Evaluation of Curriculum Plan by Content Experts
- v. Pretest/Posttest

vi. Pretest/Posttest Content Validity by Content Experts

Thanks,

Moses Ikejiofor CRNP-PMH, DNP-Student

Phone: 443-858-3581. Email: moses.ikejiofor@waldenu.edu