

Pittsburg State University

Pittsburg State University Digital Commons

Doctor of Nursing Practice Scholarly Project

Irene Ransom Bradley School of Nursing

Winter 12-10-2021

Increasing Healthcare Providers' Intent to Utilize Alternative and Complementary Pain Management With Their Patients

Holli Boyles

Pittsburg State University, hboyles@gus.pittstate.edu

Follow this and additional works at: <https://digitalcommons.pittstate.edu/dnp>



Part of the [Family Practice Nursing Commons](#)

Recommended Citation

Boyles, Holli, "Increasing Healthcare Providers' Intent to Utilize Alternative and Complementary Pain Management With Their Patients" (2021). *Doctor of Nursing Practice Scholarly Project*. 64.
<https://digitalcommons.pittstate.edu/dnp/64>

This Scholarly Project is brought to you for free and open access by the Irene Ransom Bradley School of Nursing at Pittsburg State University Digital Commons. It has been accepted for inclusion in Doctor of Nursing Practice Scholarly Project by an authorized administrator of Pittsburg State University Digital Commons. For more information, please contact digitalcommons@pittstate.edu.

INCREASING HEALTHCARE PROVIDERS' INTENT TO UTILIZE ALTERNATIVE
AND COMPLEMENTARY PAIN MANAGEMENT WITH THEIR PATIENTS

A Scholarly Project Submitted to the Graduate School
in Partial Fulfillment of the Requirements
for the Degree of
Doctor of Nursing Practice

Holli Renee Boyles

Pittsburg State University

Pittsburg, Kansas

November 2021

INCREASING HEALTHCARE PROVIDERS' INTENT TO UTILIZE ALTERNATIVE AND COMPLEMENTARY PAIN MANAGEMENT WITH THEIR PATIENTS

An Abstract of the Scholarly Project by
Holli Renee Boyles

The purpose of this scholarly project is to increase the willingness of healthcare providers to introduce alternative and complementary pain management to their patients. Two patient video tools were constructed and offered to healthcare providers to evaluate and potentially utilize the final products in their practice. One tool introduced music therapy, the other mindful meditation, along with resources for patients to investigate and learn from on their own. A total of seven healthcare providers responded to the project with a commitment to potentially utilize the final video and provided their feedback on the video tools. No changes were made to the final video product. Quick Response codes were offered to the responding healthcare providers. The codes were to increase the ease of providing the tools to their patients. The video tools do not require explanation or a licensed healthcare provider to be utilized or offered to patients. They are an introduction to alternative and complementary pain management that can be used by most patients. They provide an easy, inexpensive alternative to opioids that can be proposed to all patients experiencing pain.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
Introduction	1
Description of the Clinical Problem.....	1
Significance.....	3
Specific Aims.....	4
Theoretical Framework.....	4
Project Goals	6
Definition of Key Terms	6
Logic Model	8
Summary	11
II. INTEGRATED REVIEW OF THE LITERATURE	12
Integrated Review of the Literature	12
HCP Obstacles to Offering Alternative and Complementary Pain Management	13
Improving Patient Use of Alternative and Complementary Pain Management	14
Self-Utilized Alternative and Complementary Pain Treatments.....	16
Decreasing Opioid Use	17
Music Therapy	18
Mindful Meditation	19
Video Teaching Usefulness.....	19
Implementation of a Change Policy for Practice	21
Summary	23
III. METHODOLOGY.....	25
Methods	25
Project Design.....	25
Target Population	26
Target Population Recruitment	26
Inclusion and Exclusion Criteria.....	27
Protection of Human Subjects.....	27
Instruments	27
Procedure	28
Summary.....	29
IV. EVALUATION OF RESULTS AND DISCUSSION	30
Discussion of Final Project and Recommendations	30

Description of Sample Population and Process	30
Analyses of Project	31
Additional HCP Responses	34
Discussion	36
Evaluation Summary	37
Relationship of Outcomes to Research	37
Observations	38
Evaluation of Theoretical Framework	39
Evaluation of Logic Model	40
Limitations	40
Implications for Future Projects	41
Implications for Practice/Health Policy/Education	41
Conclusion	42
REFERENCES	43
APPENDICES	50

LIST OF TABLES

TABLE.....	PAGE
I. HCP Specialty	31

LIST OF FIGURES

FIGURE.....	PAGE
1. Diffusion of Innovation Theory	6
2. Logic Model	10

CHAPTER I

Introduction

Listening to local news in the media today can clue a person into the fact that there is currently an opioid crisis affecting the United States (U.S.). A person's introduction to opioids rarely has malicious origins. This introduction can have multiple benign-appearing origins, such as postoperative pain relief, acute injury pain management in an emergency department, dental procedure pain relief, or even a prescription from a primary care provider (PCP) to help manage pain associated with a sprained joint or a strained muscle. This chapter will discuss the risks that go along with the clinical problem of opioid dependency and what makes it a significant problem. Explanations of the reasoning behind the need for all healthcare providers (HCP) to promote the usage of alternative or complementary pain management techniques and the theoretical framework used to guide this project will be defined. Key questions for the project will be discussed, along with defining some terms with which the reader will need to be familiar. Finally, a logic model is provided and described to the reader to enable a holistic understanding of the project.

Description of the Clinical Problem

Anderson (2017) tells us that in the U.S., prescription opioids were not commonly prescribed prior to 1995. The use of opioids was reserved for patients being treated for

severe pain such as critical injuries, major surgery, or advanced cancer pain (Anderson, 2017). Since that time, the use of opioids to treat pain has increased to the point that the U.S. is experiencing a major opioid crisis. Mehl-Madrona et al. (2016) suggest that utilizing pain as the sixth vital sign may have been a significant catalyst that brought about this opioid crisis. They go on to tell us treatment by overprescribing opioids has created an even more detrimental problem for patients (Mehl-Madrona et al., 2016). Davis et al. (2017) propose the overprescribing of opioids came about from good intentions. These intentions were to avert patient suffering by preventing the undertreatment of pain in these patients. What HCPs have not always understood is other interventions can be just as beneficial to a patient without the risks that accompany opioid use (Davis et al., 2017).

With the aging population on the rise, there are more people affected by diseases. Whether these diseases are acute or chronic, the diseases' aftermath may be chronic pain. Alvarado and Salazar (2015) state, "chronic pain is considered an unpleasant sensory and emotional experience, associated to existing or potential tissue damage related to a disease process, but which persists once the lesion has been cured" (p. 139). The significance of pain and its effect on people's lives leads the authors to tell us that this is a true public health problem that can affect our health systems and cost billions of dollars annually (Alvarado & Salazar, 2015). This is a compelling reason to improve pain treatment practices and find safe, easily utilized, and cost-effective ways to treat pain for patients.

The U.S. Department of Health and Human Services (HHS), National Institutes of Health (NIH), and the National Center for Complementary and Integrative Health

(NCCIH, 2018a) define chronic pain as a pain that lasts longer than three months or longer than is usual for a condition. Chronic pain can affect all aspects of a person's life and is becoming more common as the population ages. Other effective non-pharmacological alternatives for treating chronic pain may be available but are not as easily accessed or readily used in our society. There is a current need for alternative and complementary pain management that is both safe and effective for the U.S. population.

Significance

The shift in focus to controlling patient pain with opioids has resulted in a crisis no one anticipated. There is a fine line between caring for a patient's wellbeing and causing them undue harm. Mehl-Madrona et al. (2016) found themselves, as many providers do, with patients in this unique predicament. Many of their patients had been treated by a specialist for a specific problem accompanied by acute pain. Their acute pain then turned to chronic pain. At this point, the specialist treating them had sent them back to their primary clinic to continue an opioid regimen. This was when the PCP had the difficult decision of whether to continue or try to wean the patient off this opioid. Mehl-Madrona et al. (2016) believe this presented the provider with difficult ethical care choices. They believe unintentional damage had been done to these patients by the providers they trusted with their health care. This begs the question of how a provider can ethically undo unintentional damage that has been done to a patient. A HCP ultimately enabled the patient to be in the situation of having pain and needing opioids (Mehl-Madrona et al., 2016).

Bradt et al. (2016) claim chronic pain is a leading cause of disability in the U.S. It appears the medical community played an unintentional, yet significant, part in creating

this disability in patients. Therefore, the medical community needs to be diligent in finding alternative or, at the least, complementary pain relief methods for these patients in the beginning and all other points of pain management treatment. The correction of this issue may lie in the beginning treatment of acute pain and how HCPs address pain relief. While some acute pain may be severe enough to require opioid treatment, that does not mean it should be the only means of treatment. The introduction of alternative or complementary pain management techniques could have a significant impact if a HCP adequately introduces these techniques and usage when the first complaints of pain occur.

Specific Aims

The purpose of this project is to

- Improve HCP's willingness to introduce alternative or complementary pain management options to their patients by providing a patient-teaching tool.
- Provide options for alternative and complementary pain management that are cost-effective and easily utilized by HCPs and patients.
- Reduce the amount of opioid pain medication prescribed to patients by HCPs.
- Make available alternative or complementary pain management options that HCPs are willing to recommend to patients for use in the home setting.

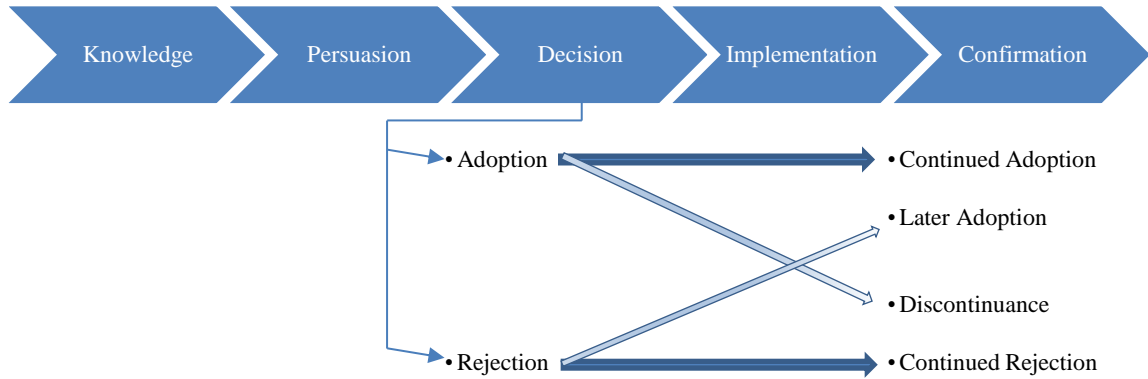
Theoretical Framework

Rogers' (2003) diffusion of innovation theory guided this change project. Rogers (2003) provides us with the five stages of the innovation-decision process, as depicted below in Figure 1. HCPs have the cognitive knowledge that there are alternative pain management therapies available to use with their patients. They just may not understand how to guide their patients to use these therapies or may not have the time to educate

their patients thoroughly. Rogers (2003) describes the how-to-knowledge and states not obtaining this knowledge is likely to lead to rejection of an innovation. Offering a tool with knowledge for the HCPs to present to a patient may decrease the likelihood of provider rejection. Persuasion stage thinking entails more of a feeling where one will form an attitude about the therapy. To improve the persuasion stage in this project, the tool seeks to make it easier for HCPs to give alternative therapy guidance. In the decision stage, a choice is made to adopt or reject the innovation. Rogers (2003) tells us providing an initial trial can improve the speed of adoption. As part of the project, a video tool will be initially supplied to HCPs for their feedback before asking them if they would be willing to incorporate it into their practice and considered an initial trial in the decision stage. The measurement of success will be evaluated at the decision stage. Rogers (2003) tells us the implementation stage can often be the conclusion of the innovation-decision process and when the innovation is actually executed. Rogers (2003) tells us that the implementation stage can also involve the re-invention of the innovation. If the tool is used in the future, it is hoped that the implementation stage is only the beginning and will lead to re-invention, enabling more alternative therapies to be implemented for pain management. The confirmation stage is when the innovation is exposed to ongoing evaluation to ensure it is providing relevant results. Due to time constraints, this study will not progress to the last two stages.

Figure 1

Diffusion of innovation theory



Project Goals

The following are goals to be accomplished with the project:

- Introduce alternative options for pain management to HCPs.
- Provide HCPs with video teaching tools to be introduced with patients as approaches to alternative or complementary pain management.
- Obtain feedback from HCPs for improvement of video tools.
- Obtain commitment from HCPs to implement alternative pain management.

Definition of Key Terms

Acute pain: “severe pain that occurs suddenly and usually lasts a short while”

(Harvard Health Publishing, 2011a, para. 1).

Alternative pain management: “a non-mainstream practice is used in place of conventional medicine” (HHS, NIH, & NCCIH, 2018b, para. 2).

Analgesia: “the selective suppression of pain without effects on consciousness or other sensations” (Nursing Theories, 2012, para. 3).

Chronic pain: “persistent or recurrent pain lasting longer than 3 months” (Treede et al., 2015, p. 1004).

Complementary pain management: “a non-mainstream practice is used together with conventional medicine” (HHS, NIH, & NCCIH, 2018b, para. 2).

Mindfulness: “a practice with its roots in Buddhism that encourages people to be more fully aware of the present moment. Often achieved through meditation” (Harvard Health Publishing, 2011b, para. 4).

Mindfulness meditation: “A form of meditation with roots in ancient Buddhist practice through which a person has a calm awareness of his or her body and feelings and is fully engaged in the present; also called insight meditation” (Harvard Health Publishing, 2011b, para. 4).

Music Therapy: “The clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy degree program (American Music Therapy Association, 2021, para. 2).

Numeric rating scale (NRS) for pain: “the most widely used tool for assessing pain, requires patients to rate their pain from 0-10, with 10 being the most severe” (Krebs et al., 2012).

Opioid: “any narcotic, natural or synthetic, that behaves in the body like an opium-derived drug” (Harvard Health Publishing, 2011b, para. 6).

Pain: “an unpleasant sensory and emotional experience associated with actual or potential tissue damage” (Nursing Theories, 2012, para. 2).

Pain threshold: “the point at which a stimulus is perceived as painful” (Nursing Theories, 2012, para. 3).

Logic Model

A logic model was developed and is depicted below in Figure 2. The project's goal is to offer HCPs an alternative or complementary pain management tool that they will be willing to utilize with their patients. This is relevant because if HCPs had an easy way to offer alternative or complementary pain management to their patients, it might reduce the number of opioids used by these patients. This, in turn, could decrease the number of opioids prescribed and ultimately decrease opioid dependence and potential future abuse. It is envisioned this might ultimately help to alleviate a portion of the opioid crisis plaguing the U.S.

Multiple inputs will be needed for the process to take place. Initially, cooperation from HCPs will be needed, as they are important stakeholders in the project. There will also be a need for time on the part of these stakeholders. The HCPs will need to view the video tools. Materials will be in the form of a paper with a short description of the tool and website address to access the tool.

Activities will be completed by the project author and those participating in the development of the video tools. It will involve recording two video teaching tools to give to HCPs to review. At this point, the HCPs will be asked for their feedback for improvement, the usefulness and possibility of implementing the tool with their patients. The videos will be re-recorded, if needed, based on the HCPs' feedback. The author will then deliver the final video teaching tool to the HCPs and provide a handout to be given to patients. The HCPs will then be encouraged to utilize the videos with their patients.

Outputs will be the HCPs' feedback on this project, the final video tool, and increased HCPs use of alternative and complementary therapy.

There are short-term and long-term outcomes to be appreciated with the project. It is believed the short-term outcomes will be improved patient education on pain relief, access to a convenient tool for pain relief, and decreased medication side effects. The long-term outcome is HCPs would give fewer opioid prescriptions, leading to a reduction of patients dependent on opioids, and ultimately, a reduction in the opioid crisis.

Figure 2

Logic model

Project Goal: To deliver HCPs an alternative or complementary pain management tool to utilize with their patients.

Situation: Patients with pain are primarily not offered alternative or complimentary therapy for pain relief. These options may offer equal or improved pain relief and decrease the number of opioids needed to reduce pain. This could decrease the number of opioids prescribed and reduce opioid dependence and potential abuse.

Inputs	Activities	Audience	Outputs	Outcomes Short-term	Outcomes Long-term
Cooperative HCPs Time Video Tools Handouts	Record two Video Teaching Tools HCPs Provide Feedback Provide Final Video Teaching Tools to HCPs	HCPs	Final Video Teaching Tool Increased HCP Utilization of Alternative and Complementary Therapy	Improved Pain Relief for Patients Convenient Tool for Pain Relief Decreased Medication Side Effects	Fewer Opioid Prescriptions Fewer Patients Dependent on Opioids Reduction of Opioid Crisis

Assumptions:

- HCPs are interested in decreasing patient pain without the use of medications.
- HCPs will offer the tool to their patients.
- HCPs believe the tool will help their patients.
- HCPs want to decrease the number of opioids they prescribe.

External Factors:

- HCP bias

Summary

The use of opioids in this country has become excessive in nature. Even with the increased use of opioid therapy, there does not seem to be adequate pain relief for people that suffer from acute and chronic pain. There has got to be a better way to handle this issue. Medicating patients is not necessarily improving their pain; they are just building a tolerance to and becoming dependent on opioids. They continue to suffer from pain and the side effects that accompany opioid use.

The purpose of this project is to provide HCPs with an alternative or a complementary method to assist with pain relief with their patients. It is believed if this method were available, affordable, and utilized, the number of opioids used would be reduced. HCPs could provide patients with a safe, effective, and convenient alternative to treat their pain, or at the least adjunct therapy to reduce the opioid usage and improve their quality of life. If alternative ways to deal with pain are utilized and shown to be effective, we may find our population developing less chronic pain. The intention of this project is to furnish HCPs with a tool they are comfortable using with their patients, and presenting an inexpensive, easily accessed way to aid in decreasing pain even in uninsured or underinsured patients.

CHAPTER II

Integrated Review of the Literature

A comprehensive review of the literature was completed to improve the understanding of alternative and complementary pain management, ways to strengthen a HCP's willingness to utilize these methods, video use in patient education, and policy and practice change. Searches were performed using Pittsburg State University's electronic database. CINAHL Plus with Full Text, Proquest Nursing & Allied Health Source, and PubMed were employed for this search. Search criteria and phrases consisted of combinations of alternative pain treatment or management or therapy, self-directed pain treatment or management or therapy, improving patient motivation, improving provider motivation, motivate or motivation or motivated, patient education or patient teaching or patient information, video teaching, policy change, and pain. Chain searches were performed by utilizing the reference lists of articles obtained through the databases to provide additional relevant literature. Other resources were searched to clarify critical terms in this review and identify prominent resources to aid in the review. Limitations placed on the searches were that they had to be published within the past ten years, full-text data, peer-reviewed, and English language.

For this literature review, treatments to aid in managing chronic pain were investigated, along with video teaching and policy and practice change. Treatments were

confined to interventions that did not consist of medications or surgical procedures. The search was limited to interventions that could be utilized by chronic pain sufferers in their home environment. The review of the literature investigated alternative treatments for chronic pain that can be used to decrease opioid usage. In addition, the review included whether these sufferers would be willing to dedicate the time to learning these techniques and putting them into use in their daily lives.

HCP Obstacles to Offering Alternative and Complementary Pain Management

Engaging patients in their healthcare is not a simple task. McCarron et al. (2019) and Hamlin and Robertson (2017) discuss the irregular rates at which this is attempted and the narrow success rates providers have in involving patients in their own healthcare decisions. Becker et al. (2017) found some of the reasons for not offering this treatment were that HCPs did not believe their patients were willing to try alternative and complementary therapies for their pain. They found that HCPs believe their patients do not think these options are as effective as medications. This was also found to be a belief held by other HCPs (Hamlin & Robertson, 2017). The difficulty in understanding this comes with the knowledge that alternative and complementary therapies have been shown to decrease pain, increase function, and increase the quality of life in many patients who utilize these therapies (Hamlin & Robertson, 2017).

Pain management can be improved in much the same way other healthcare is improved. McCarron et al. (2019) state that stakeholder involvement is required to change healthcare; this includes the participation of the provider and patient. According to Hamlin and Robertson (2017), HCPs are unsure of what types of alternative and complementary pain management options are available in their community. As for the

options that a patient can self-administer, many providers are unsure how to perform these treatments and techniques, yet patients look to them for guidance. This makes it unlikely an HCP would recommend this type of treatment to a patient or that the patient would have faith in the trustworthiness of the treatment (Suman et al.,2017).

Weisbeck et al. (2019) encourage a therapeutic rapport between HCPs and patients to increase patient empowerment and health outcomes. It allows for collaboration that leads to a more patient-centered care. Since pain is subjective, it can be challenging to control and can strain the relationship between the HCP and patient, leaving both dissatisfied (Becker et al., 2017; Weisbeck et al., 2019). Patients do not always feel HCPs believe them when they discuss the effects of their pain, which demonstrates a need for improved trust between patients and providers.

Improving Patient Use of Alternative and Complementary Pain Management

Suman et al. (2017) discuss patient learning from various media and what has been shown to be effective. When HCPs introduce the intervention early in the development of pain, patients feel they get more use out of some interventions. Patients feel that when HCPs discuss the intervention with them, they have greater trust in the treatment and motivation to use it (Suman et al., 2017). Penney et al. (2016) suggest that patients need better education on what to expect from their alternative and complementary pain management. Better outcomes are achieved when HCPs and patients discuss realistic expectations of the treatment and how it will affect their pain (Penney et al., 2016). Patients with chronic pain can then come to understand the chronic nature of their pain and that participating in self-care is part of the chronic nature (Penney et al., 2016). Patients and providers can get frustrated with the long-term use of opioids to treat

pain (Penney et al., 2016). This is not saying medications will no longer be needed for treatment, but alternative and complementary therapy may help decrease or eliminate the need for those medications (Mehl-Madrona et al., 2016).

Patients and HCPs identify support from family, friends, and HCPs as important factors related to successful alternative and complementary therapy (Becker et al., 2017). McCarron et al. (2019) uncover factors for engaging patients and families in healthcare. Some of these motivations could prove relevant to providers wishing to improve patient and family healthcare involvement. McCarron et al. (2019) found “Self-fulfillment, improving healthcare, compensation, influence, learning new things, conditional and perks” to be strong motivators for connecting patients to their healthcare (p. 716). It is essential to remember that engaging the patient and family is important, and motivating factors continually change (McCarron, 2019). This is a reason to keep the lines of communication open and operating. Patients believe support and encouragement from the whole medical team are important to their use of alternative and complementary therapy (Becker et al., 2017).

Becker et al. (2017) uncovered barriers related to access that hinder patients from utilizing alternative and complementary therapies. Issues associated with traveling to therapy, the cost, or just the lack of it being provided in their area decrease their likelihood of employing this method of pain therapy. Patients were found to prefer having a therapy that is close to or in their home. They liked the idea of therapies being readily available, timely, and easy to access (Becker et al., 2017). Unfortunately, insurance plans do not cover some therapies, and patients feel they are too expensive (Becker et al., 2017;

Hamlin & Robertson, 2017). In addition, not all therapy locations are accessible to the patients who need them.

Patients do not know what to expect from alternative and complementary therapy (Becker et al., 2017). This can make them uneasy when it comes to participating in therapy. HCP empathy, open communication, shared decision making, and respect of the patients' preferences regarding treatment modalities is something patients feel is important (Becker et al., 2017). Provider explanations of the evidence behind the therapy and what the patient could expect to achieve from the therapy would significantly improve patients' openness to attempting these therapies (Becker et al., 2017; Hamlin & Robertson, 2017).

Self-Utilized Alternative and Complementary Pain Treatments

Many alternative and complementary pain treatments are available for self-use. Cost, simplicity, access, training needed, and effectiveness are just a few of the factors that determine a patient and provider's choice (Becker et al., 2017; Penney et al., 2016). Multiple alternative pain therapies could be used to treat pain and decrease or prevent the need for opioid use. To be helpful, these therapies must provide the patient, who is experiencing pain, with a significant benefit to reducing their pain, increasing their ability to function, or meet other factors essential for pain relief.

Mehl-Madrona et al. (2016) found in their study that patients were resistant to trying forms of pain management other than opioid therapy. These patients were very resistant and believed that since their pain was physical, opioids medication was the only treatment that would work. This caused difficulty randomizing treatments and finding willing participants for the study that utilized other forms of therapy (Mehl-Madrona et

al., 2016). Their reluctance to participate in the therapy seems to provide even more credibility to alternative therapy pain reduction results since these patients were able to reduce their opioid use through alternative therapies.

Decreasing Opioid Use

Some patients have been treating their chronic pain for years with narcotics, both successfully and unsuccessfully. The multitude of alternative therapies shows there is a willingness to find a different method. Multiple side effects touch on physical, mental, social, economic, and even safety aspects. The goal is not only to reduce chronic pain but to decrease the number of opioid medications used to treat this pain. Utilizing alternative pain management therapies may be able to take the place of some opioid medication, or at the least, decrease the dosage or frequency of these medications. This is a very lofty goal, especially from the viewpoint of the chronic pain sufferer (Mehl-Madrona et al., 2016).

A study conducted by Mehl-Madrona et al. (2016), rationalized that “a philosophy that non-pharmacological methods . . . were better long-term than opiates and a culture that encouraged reduction or cessation, would have an impact on these patients, regardless of their initial bias” (p. 622). This study educated patients through group therapies. They learned specialized movements, guided imagery, mindfulness, qigong, yoga, tai chi, and relaxation training. These patients were not optimistic at the prospect of group therapy to treat their pain. The six-month study resulted in 18 patients reducing their opioid dosage and eight patients being able to stop opioid usage for chronic pain (Mehl-Madrona et al., 2016). Opioid reduction can be complicated with physical and

psychological symptoms for the patient. The highly addictive nature of these opioids complicates the lives of chronic pain sufferers.

Music Therapy

Music therapy that can be utilized with most pain issues is inexpensive, easy to use, and has few adverse effects (Devare Phadke et al., 2014; Krishnaswamy & Nair, 2016; Wen Fen Beh et al., 2018). Hamlin and Robertson (2017) describe music therapy as very versatile and describe the modes of utilizing music therapy as playing, listening, or writing music. One of these techniques could be used as a self-therapy without regard to specific adaptation or teaching techniques that would be dependent on the type or location of the pain. Even those with a particular limb issue could listen to music if playing or writing were found to be difficult. The choice of music or sounds can be the preference of the patient or chosen by a therapist. (Hamlin & Robertson, 2017). The therapy can be initiated by a therapist, HCP, family member, or patient with effective results. Comfort changes in the environment such as blankets, dim lighting, and removing other technology can add to the general effectiveness of the therapy (Hamlin & Robertson, 2017).

There are multiple desirable effects of music on the patient, including decreasing pain perception, anxiety, stress, heart rate, blood pressure, and increasing mood and circulation (Hamlin & Robertson, 2017). Devare Phadke et al. (2014) tout the benefits of music therapy in comforting and relaxing postoperative patients. Krishnaswamy & Nair (2016) found music to reduce pain in cancer patients significantly. In a study conducted by Brandt et al. (2016), vocal music therapy was found to have a moderate effect on pain intensity, improve self-efficacy, motivation, and empowerment.

Mindful Meditation

Pain therapy using mindful meditation techniques has few limitations. Most pain sufferers would be capable of employing this self-therapy with modest teaching.

Mindfulness can be described in various ways. Zimmaro et al. (2019) define mindfulness as attention to the present moment in a nonjudgmental manner. They assessed patients by utilizing the Five Facet Mindfulness Questionnaire-Short Form. This form helps identify mindfulness with five subscales: observing, describing, acting with awareness, nonjudging, and nonreactivity (Zimmaro et al., 2019). Garland et al. (2020) describe mindfulness as self-regulating thoughts, physical sensations, and emotions.

Both studies provided tangible results. Garland et al. (2020) succeeded in helping patients who had been on long-term opioid therapy to reduce their opioid use and pain symptoms. During therapy, patients were able to reduce their heart rates (Garland et al., 2020). The Zimmaro et al. (2019) study helped metastatic breast cancer patients to decrease their pain, fatigue, and psychological distress.

Video Teaching Usefulness

A review of the literature found many studies using a pre-test, followed by a video teaching intervention, and a post-test brought meaningful results to light (Chandran & Binutha, 2020; Gilmore et al., 2019; M et al., 2020; Ravindran & Binutha, 2017; Seshan et al., 2013; Suseelal & John, 2018). Preprocedural teaching was the goal of Ravindran and Binutha (2017) as they sought to improve knowledge and decrease the anxiety in patients prior to undergoing a colonoscopy. Reduction of opioid usage post-sexual assault was the area studied by Gilmore et al. (2019). The testing of video teaching's impact on the knowledge and practices of patients was looked at by Chandran

and Binutha (2020), M et al. (2020), and Suseelal and John (2018). One study looked at the effectiveness of video teaching for patients managing their post-acute coronary syndrome at home (Chandran & Binutha, 2020). Suseelal and John (2018) investigated how a video-based home education program could help to improve the lifestyles of diabetic patients. Another study strived to reduce recurrences of myocardial infarcts in post coronary angioplasty patients (M et al., 2020). An additional video-assisted teaching program looked at teaching women with few resources to reduce their urinary incontinence symptoms (Seshan et al., 2013). Gilmore et al. (2019) and Seshan et al. (2013) used the video teaching portion in addition to other healthcare teachings for their intervention and control groups. Their studies revealed significantly improved results for the groups undergoing the additional video teaching.

Video teaching in three of the prior studies was evaluated for the ability to increase knowledge. Pre-tests and post-tests were utilized to assess knowledge in relation to their teaching videos (Chandran & Binutha, 2020; M et al., 2020; Ravindran & Binutha, 2017). Each study found that video teaching, along with the standard of care, provided subjects with an increase in their knowledge beyond what was shown in the control groups receiving only the standard of care. Preprocedural anxiety was reduced in patients scheduled for colonoscopies (Ravindran & Binutha, 2017), and reduced symptoms were seen in women with urinary incontinence (Seshan, et al., 2013) when video teaching was used. Participants demonstrated better choices and improved lifestyle changes with video teaching (Gilmore et al., 2019; Suseelal & John, 2018) and attested to a better quality of life (Seshan, et al., 2018; Suseelal & John, 2018). Video education proved to be beneficial for teaching mindfulness and relaxation techniques to sexual

assault victims, and there was no evidence of a time burden for emergency room staff (Gilmore et al., 2019). When limited resources are available, videos can be a beneficial way to provide education to a large number of people (Seshan, et al., 2013) and deliver a convenient home-based education (Suseelal & John, 2018).

There are other aspects of video teaching that leave room for further investigation. Ravindran and Binutha (2017) felt a larger sample size, assessing other invasive procedures, and including studies on other diagnostic and therapeutic interventions could prove beneficial. Gilmore et al. (2019) conducted a study in large metropolitan cities. They felt the addition of a rural population, larger sample, and men or sexual/gender minority populations could provide even greater insight into the benefit of video teaching. Thus, there continues to be room for growth when it comes to video education, which could lead to significant healthcare improvements. The utilization of video teaching could potentially enable healthcare providers to better educate their patients and a greater number of patients, thus improving healthcare.

Implementation of a Change Policy for Practice

There are multiple reasons change policies are accepted or rejected. Providing a beneficial policy change does not ensure buy-in from stakeholders. Skage and Dyrstad (2019) researched causes for acceptance or rejection of a change policy in teaching. They found that even though head teachers felt there was a benefit to the policy change, it did not take precedence over their other concerns. This is a common theme in many areas concerned with policy change (Araba Kash et al., 2014; O'Rourke et al., 2016; Presseau et al., 2017; Skage & Dyrstad, 2019). There has to be a greater motivation to go the extra mile. When a change increases the workload for those implementing a change (Presseau

et al., 2017; Skage & Dyrstad, 2019) or the appropriate tools are unavailable (Presseau et al., 2017), it can deter willingness to participate. Addressing these concerns and facilitating ease of implementation has the potential to improve policy acceptance and practice by the stakeholder.

A study of nurse practitioner-led clinics in Ontario looked at how stakeholders contributed to system changes, why they participated, and how the barriers and facilitators were recognized and responded to by stakeholders (O'Rourke et al., 2016). It was found that stakeholders need to feel there is a need for the change. This need must affect them on a personal or professional level, enough so that they are willing to back the proposed change and implement the new steps (O'Rourke et al., 2016). According to Arbab Kash et al. (2014), fitting into the culture and values of an organization was found to be the top theme for successful change efforts among healthcare leaders. If there is a relationship between the policy change and healthcare guidelines or local policy, this can improve acceptance (Presseau et al., 2017). People and engagement, along with service quality and client satisfaction, are themes researchers found lead to successful change efforts (Arbab Kash et al., 2014).

Understanding stakeholder motivation is imperative when implementing change (O'Rourke et al., 2016). Once stakeholder motivation is understood, it enables the leader to procure solutions for a variety of potential rejections (O'Rourke et al., 2016) and allows for greater buy-in to change. Conversely, if a stakeholder has no motivation or perceived benefit to gain from the change, the change is not a high priority (Presseau et al., 2017). This could lead to forgetting to utilize the change in practice and the potential for reduced compliance with the change policy.

Skage and Dyrstad (2019) found that a lack of in-depth knowledge of the change was a prominent reason for rejecting a policy change. They recognized that buy-in could be improved by explaining how the change would support the current policies and goals and what they could achieve with the new implementation. To enhance the likelihood of change, leaders need to engage not only those stakeholders who support the change but also those opposed to the change (O'Rourke et al., 2016). This can be a difficult task that stakeholder education could improve. Gunty et al. (2019) found that providing the opportunity to cultivate knowledge and the skills needed to perform a change increased success. This continued growth also promoted episodic change, which could be utilized to encourage continuous change. This type of change was proven to be an efficient tool to enable organizations to produce sustainable changes.

Moran et al. (2017) discuss the importance of having clear expectations and a thorough understanding of the purpose when taking on a policy change. A stakeholder's perceived benefit, personal or professional need, motivation, and knowledge were a central theme to this portion of the literature review. Addressing these areas when implementing a change in policy and practice could significantly help to encourage and increase stakeholder participation.

Summary

This literature review demonstrates the need for a tool that HCPs are comfortable offering their patients for alternatives to opioids. Having a small number of alternative and complementary pain management therapy tools at their disposal would allow HCPs to get comfortable offering them to patients. Having just a couple of these therapies will enable HCPs to learn about them and how they could best be used for their patients.

The addition of alternative and complementary pain management therapy has the potential to be a burden for HCPs. The time and extra steps explaining this therapy in the clinic may hinder them from offering it to their patients. Providing video education for patients could ease the burden of an additional task for HCPs. Video teaching may provide them with an efficient way to educate their patients and encourage them to implement changes in their practice. Providing extra education beyond routine care is more likely to be implemented when it is seen as a benefit to patients and not a burden to HCPs.

These therapies can be utilized as strictly complementary to therapy the HCP is already comfortable providing their patients. There does not necessarily need to be a change in current pain management therapy. The hope is the introduction of alternative therapies will provide an incentive for HCPs to offer alternative and complementary pain management therapy even if they prefer their current plan of care for patients. Many of the same barriers and facilitators to using alternative and complementary pain management use were voiced by both patients and HCPs, suggesting that these are real issues (Becker et al., 2017). This provides a place to start when wishing to improve utilization by both parties.

CHAPTER III

Methods

The opioid crisis is a topic relevant to almost all HCPs. The Centers for Disease Control and Prevention (2021) state that in 2019, nearly 50,000 people died of an opioid overdose. HCPs play an essential role in combating this crisis. When a patient is in pain, their HCP is usually the first place they go for advice. Having an alternative plan to address a patient's pain complaints can give HCPs options when it comes to treating these patients. Research has shown there are many alternative and complementary pain control methods available to treat pain, although they are not always considered or understood.

Project Design

This change project was designed to provide educational videos as a tool to teach patients alternative and complementary pain management techniques with the goal to increase HCP's willingness to offer these therapies. The scholarly project was explained to the HCPs through an email. HCPs were asked if they were willing to participate in this project. Participation entailed viewing two patient teaching videos that each offered a different type of alternative and complementary therapy, providing feedback and agreeing to potentially use the videos with patients in the future. Those HCPs that agreed

to participate in the project were emailed a link to view each video and were asked to provide feedback on the content.

One week after providing the two teaching videos to the HCPs, they were again contacted by email and asked to provide feedback to the author. The correspondence inquired about any questions the HCPs may have had and requested their thoughts on the videos, such as any changes they believed would be beneficial. Some HCPs offered recommendations for changes to the teaching videos, and an additional video was then recorded with the recommended changes in consultation with an expert on development of videos. The goal was to provide an educational video tool that would make it easier for HCPs to utilize alternative and complementary pain management therapies with their patients.

Target Population

The population used in this study was seven HCPs. They are providers who treat a variety of patients, including those with pain complaints. These HCPs consisted of rural area advanced practice registered nurses, doctors of osteopathy, medical doctors, and physician assistants.

Target Population Recruitment

The HCPs for this study population were recruited through convenience and snowball sampling. An email cover letter was utilized to briefly explain the project and the request for volunteers. Local clinic practice managers were contacted in person to initiate the process of obtaining volunteers. Word of mouth was used for obtaining additional volunteers. They were recruited from clinics in the four-state areas of Kansas,

Missouri, and Oklahoma, including the cities of Pittsburg, KS; Joplin, MO; Girard, KS; Galena, KS; Coffeyville, KS; Chanute, KS; Miami, OK; and Lamar, MO.

Inclusion and Exclusion Criteria

Inclusion criteria was comprised of HCPs holding a professional practice license that allowed them to prescribe pain treatments to their patients, to include advanced practice registered nurses, doctors of osteopathy, medical doctors, and physician assistants who regularly treat patients with pain complaints. The HCPs had to be willing to evaluate the alternative and complementary pain management video tools and provide feedback. Exclusion criteria consisted of those providers not actively practicing in a healthcare facility.

Protection of Human Subjects

All participants were over the age of 18. No deception, discomfort, or harassment of participants took place. There were no criminal, civil, financial, or employment implications. Participation was strictly voluntary, and no patients were utilized for this change project. By the HCP agreeing to review the videos, consent was assumed. Correspondence has been kept electronically on the author's private computer that is password-protected to ensure confidentiality. This is a change project and not a research project, therefore did not require Institutional Review Board approval.

Instruments

For this project, a brief explanation of the project and information emphasizing the importance of alternative therapy for pain (Appendix A) was emailed to the HCPs in the identified project area. Potential HCPs were encouraged to participate in this change project and were provided with the author's contact information if they were willing to

participate. A second email (Appendix B) along with two educational video presentations links were then sent to the HCPs who agreed to participate in the project. The first video was related to music therapy (“1st internet link”), and the second video was related to mindful meditation (“2nd internet link”). A content outline for each of the videos was developed before the videos were recorded (Appendices C and D). Each video had the ability to be accessed via an internet link or quick response (QR) code. The videos were voice-over PowerPoint presentations. Each video was five to ten minutes in length. The end of the videos provided guidance related to accessing additional resources for HCPs and patients wishing to further their knowledge of music or mindful meditation therapy.

The author created these teaching videos for alternative and complementary pain management as no current tools were discovered in the literature review. Videos remain accessible for HCPs to view and use with professional discretion in their practice. HCPs were encouraged to make changes to their practice by sharing these teaching videos with their patients dealing with pain issues. The QR codes were provided for ease of use in the future for those providers who choose to utilize the videos in their practice. Utilizing this tool provides little time burden to the HCP or their clinic and no additional cost to them or their patients. In addition, there is no restriction on location or time of day when alternative or complementary therapy is used, so it can be easily used when pain presents.

Procedure

Alternative music therapy and mindful meditation educational and informative videos were developed by the author. HCPs in the four-state area were contacted and invited to participate in the project via email, phone call, in person, or text message to establish possible interest in participating in this change project. Those willing to

participate were emailed a description of the project and its criteria. HCPs that agreed to take part in the project were emailed the internet links providing access to the two educational videos. Participants were asked to view the videos and provide feedback via email to the author. After the author reviewed the feedback, the videos were revised as appropriate. The revised videos' internet links and QR codes were provided via email to all participating HCPs to be used in their practice.

Summary

The project provided a video teaching tool for alternative therapy that aimed to educate on pain management that can be implemented into any HCP's current practice. The purpose of this change project is to help HCPs easily utilize these valuable therapies with their patients.

CHAPTER IV

Discussion of Final Project and Recommendations

The project's purpose was to improve HCPs' willingness to introduce alternative or complementary pain management options to their patients. To accomplish this, cost-effective and easily utilized tools were developed and provided to HCPs to implement with their patients. The overall goals to be accomplished with the project were to introduce alternative options for pain management to HCPs and provide the HCPs with video teaching tools to present alternative and complementary pain management options to their patients. As part of the project, the HCPs' opinions were requested for improving the video tools and a commitment to implement alternative pain management in their practice.

Description of Sample Population and Process

The responding HCP sample consisted of seven advanced practice registered nurses. The HCPs all practice medicine in the rural communities of Kansas and Missouri. Each holds a license allowing them to treat pain complaints for their patients. These HCPs care for a variety of patients in the family practice setting or in a specialty area, as depicted in Table 1 below. All of the HCPs see patients who have pain complaints. Each HCP communicated their willingness to evaluate the video tool, provided feedback, and agreed to potentially use the alternative and complementary tool in their future practice.

The initial emails for the change project were sent out from September 23, 2021, to September 30, 2021. Responses and feedback were collected beginning September 28, 2021, through October 22, 2021.

Table 1

HCP Specialty

HCP Identification	Type HCP	HCP Specialty
HCP 1	APRN	Urgent Care
HCP 2	APRN	Family Practice
HCP 3	APRN	Orthopedics
HCP 4	APRN	Family Practice
HCP 5	APRN	Urology
HCP 6	APRN	Family Practice
HCP 7	APRN	Family Practice

Analyses of Project

The first goal for the project was the development of alternative options for pain management to HCPs. Two video tools for alternative pain management were developed to be utilized by HCPs in their practice with patients. The author researched information to be provided in the videos and worked with a communication faculty member in the development of the videos. One video discussed music to help relieve pain, and the other addressed mindful meditation. Both videos began with a summary of the video's goal, a discussion of standard pain treatments and drawbacks, and explanations of alternative and complementary pain treatments. Major content in the music video included an introduction to types of music therapy, a discussion of studies, and the variety of options for using music to relieve pain. The mindful meditation video involved discussing the variety of ways people utilize mindful meditation, descriptions and what to expect from

mindful meditation, and basic suggestions. Both videos conclude with references and discuss how to access additional resources to explore these pain options. Each video provided encouragement and a brief introduction to different alternative and complementary pain management techniques. In addition, each video provided a list of references the HCP could use to learn more about the video information and techniques.

The second project goal was to provide HCPs with video-teaching tools to be introduced with patients as approaches to alternative or complementary pain management. The videos were posted as unlisted on YouTube to allow ease of viewing with the web address or QR code. The video links were then emailed to HCPs who agreed to participate in the project. A project explanation and recruitment email (Appendix A) was sent to each provider explaining the purpose of the change project. A description of the videos was provided, along with ways the videos could be used with their patients. The HCPs were invited to participate by responding to the email.

The pain management tools the author developed and provided had no associated cost for the patients or provider. The project videos could easily be utilized in the clinic, hospital, or home setting with access to an electronic device with internet capability. For those HCPs responding to the first email, the video link email (Appendix B) was sent to them. The video link email contained the links to the two patient information videos. In the comments section of the YouTube link, the author pinned additional resources and tools to be utilized by patients who wished to learn more about using the particular technique to help manage their pain.

The third goal was to obtain feedback from HCPs for improvement of video tools. In an email sent to the HCPs, they were asked for feedback on improvements to the

videos they felt would allow them to be utilized with their patients. HCPs were advised they would be receiving a final copy of the video links, along with a QR code, in anticipation of the HCP utilizing the videos with their patients. They were asked to direct any questions to the author's email address. They were asked to comment on the video and provide feedback on what they would like to see differently in the videos to help them utilize them with their patients. Three HCPs stated their thoughts on the importance of the topic. One participant stated, "With the opioid crisis we are experiencing, any alternative method for managing pain is a good idea." A second HCP stated, "Alternatives to the use of or in conjunction with pain medications is an important subject." While another HCP stated, "Overall, I think it will be a great resource for providers and patient and pain management." These responses demonstrate the HCPs' feeling about there being a need for a change to managing pain. Research findings by O'Rourke et al. (2016) stated stakeholders need to feel a change is an important one or they may not be willing to implement the change successfully.

A concern was voiced by a HCP, that she believed meditation therapy "would be harder to implement in practice in a clinical visit. It requires teaching and practice. Encouraging a patient to breathe through a procedure could be considered meditation of sorts and may be helpful." In a follow-up email, an explanation of the tool's stand-alone ability and intention to be utilized in the home setting or while waiting for the HCP was offered. Of the seven HCPs, only one recommended an addition be made to the videos. She proposed the addition of "more data pertaining to more specific patient outcomes. It would be great if you had some actual patient testimony." The addition of testimonials to the video tools were considered by the author, and it was decided not to include them in

the video tools. Testimonials would require permission from patients as well as the benefits through evidence-based investigations. Obtaining this documentation could not be accomplished within the time frame for this project. However, some of the resources listed in the videos' comment section had testimonials from people who used the actual methods.

The fourth and final goal was to obtain commitment from HCPs to implement alternative pain management. The commitment to utilize alternative or complementary pain management in one's practice was implied by the HCP requesting the tools to evaluate them. One HCP stated their clinic was currently using music in their procedure rooms to make patients more comfortable and less anxious. Music during procedures may also help to relieve patient pain.

Additional HCP Responses

HCP responses were obtained through email, with one response being via a follow-up phone call after they received the video tools. The overall responses to this change project and video tools were positive in nature. HCP 1 stated, "I enjoyed your videos." Brief responses were obtained from HCP 2 saying, "Looks and sounds good," and HCP 3's statement, "I love the encouragement in the second video. Felt like you were in the room coaching next to me. Well done." The response from HCP 4 was the videos would be "helpful for patients with chronic pain issues....This is a great idea." HCP 5 indicated, "I think the videos were very informative... Being enthusiastic during the videos also helps keep people engaged." The thoughts of HCP 6 were, "I liked your videos and thought they were very informative... I like how you give them resources for

guidance of varying lengths and types.” HCP 7 wrote, “I enjoyed all the information provided in the videos. I thought it was informative and easy to understand.”

The beliefs of some HCPs were noted in the statement from HCP 6, “The patient will have to have an open mind... Other patients are not going to be willing to try the alternative methods. Many want a quick fix method, unfortunately.” This feedback endorses the findings in the review of literature noted by Becker et al. (2017) as they state providers do not believe their patients are willing to use alternative and complementary therapies. Patients do not think it will help relieve their pain. In addition, Becker et al. (2017) and Hamlin and Robertson (2017) found some HCPs held the same belief that alternative therapies could not relieve a patient’s pain. Feedback received from HCP 4 endorses this literature finding as he described a patient with back pain, “may not benefit from either of these methods, as this patient is in need of surgery.” When discussing forms other than opioids to reduce pain, Mehl-Madrona et al. (2016) found patients resisted these options; feeling pain was real, so only opioids would work. HCP 6 indicated thoughts related to the finding when she stated, “We have to change conventional thought of just getting a new pill to fix something, but instead looking at a more personal, less pharmaceutical alternative too.”

HCP 6 inquired, “Are there any studies that state one kind of music is more beneficial than another? Like would heavy metal or gangster rap still help with relief of pain, if you like that music?” The literature discusses how the self-selection of music is beneficial to managing pain (Hamlin & Robertson, 2017). HCP 6 stated, “I don’t think many have thought of music as a way to ease chronic pain. I think some may be using it for this and for stress relief without realizing it.” Hamlin and Robertson (2017)

recognized the benefits of music on stress and anxiety. While Devare Phadke et al. (2014) discuss the use of music in comforting and relaxing postoperative patients. HCP 5 communicated utilizing music in their clinic. She stated, “We have incorporated music during urodynamic studies which has helped both patient and provider feel more at ease. Music therapy would likely be helpful during cystoscopies as well.” The additional implementation of video teaching may be beneficial in these instances as literature demonstrates a noted reduction in preprocedural anxiety (Ravindran & Binutha, 2017).

In the literature review, Penney et al. (2016) acknowledge better outcomes when realistic treatment expectations and their effects are discussed with patients. HCP 1 spoke of these matters being mentioned, “I like that in both of your videos you indicate that these alternatives will not completely alleviate pain but are wonderful resources that can help the mine focus on something other than the pain.” A review of the literature also demonstrates that videos in healthcare significantly impact patient knowledge and practices (Chandran & Binutha, 2020; M et al., 2020; & Suseelal & John, 2018). HCP 5 stated, “I found both [videos] helpful and should be considered by all providers to be something implemented when possible in the medical field.”

Discussion

The overall purpose of this change project was to motivate providers to utilize alternative and complementary pain management tools with their patients. These tools needed to be cost-effective and easy to use by both HCPs and patients. Providing the tool to patients could help to reduce the amount of opioid pain medication HCPs prescribe. For the reduction to happen, HCPs needed to be willing to recommend alternative or complementary pain management options to their patients for use in the home setting.

The HCPs in the project agreed alternative and complementary pain management is an important part of treating patients with pain.

Evaluation Summary

The change project may work to improve and adapt the way HCPs care for their patients in the ever-changing healthcare system. It can also help to strengthen a HCP's willingness to introduce alternative and complementary pain management techniques to their patients. The project has the ability to change a patient's life and potentially the whole healthcare system. Introducing a patient to treatments other than opioids and medication allows the patient to have control of their pain treatment. Providing an additional tool to patients may help create autonomy for patients suffering from pain and give them back some control over their pain and possibly their lives.

It is anticipated the intervention will be utilized in each provider's clinical practice. At the least, the project has reminded HCPs of the benefits of alternative and complementary pain management options. The mission was to prompt HCPs to introduce their patients, with pain issues, to the idea of utilizing other methods to assist with the management of their pain. The videos are short, have no associated cost, and the interventions can be used by a patient almost anywhere. As Suman et al. (2017) remind us, when a trusted HCP is the person introducing a patient to a new alternative or complementary pain management option, there is a greater chance the patient will choose to implement the treatment.

Relationship of Outcomes to Research

The project goals were established, addressed, and accomplished with the change project. HCPs participating in the project and those who did not respond to the initial

email have been provided with a final video tool they may offer to their patients. These tools do not require the HCP to do anything more than give the patient a piece of paper or post a sign in the office providing a web address or QR code to scan. If HCPs wish, they may allow the patient to view the videos while in their clinic. Viewing the video could be accomplished while the patient is waiting to be seen by the HCP. Therefore, a convenient tool for pain relief is offered to the provider and the patient, with the utilization by the patient easily accessible and could be used at home or at almost any location.

However, not all the outcomes related to the change project have been realized at this juncture. The change project did not evaluate the actual use of the tool by HCPs. When the HCPs implement the tool, it is believed patients will have improved pain relief. In addition, when the therapies are used, they may allow the patient to reduce their medications, therefore decreasing medication side effects.

Long-term outcomes may be realized in the future as HCPs become more accustomed to providing alternative and complementary pain relief options to their patients. With the increased use of these options, it is hoped fewer opioids will be prescribed for pain relief. As providers utilize these options, the long-term outcomes could lead to fewer patients dependent on opioids, thus reducing the current opioid crisis.

Observations

Participation in the change project was minimal, as only seven providers participated. Some providers agreed verbally or by text message to participate in the project, but no email response was received. When contacting clinics, some office managers stated they did not wish to assist in the change project by forwarding the email. Unfortunately, it is unknown how many emails were actually delivered to providers.

By providing an alternative or complementary pain management tool through the project, HCPs may be prompted to think of other non-opioid tools they can begin to utilize with their patients. The final video tool was provided to all HCPs and clinic managers who had been contacted with the initial explanation email. Any change towards alternatives to opioids is a step in the direction desired through this project.

Evaluation of Theoretical Framework

Rogers' (2003) diffusion of innovation theory was utilized to guide the change project. As discussed in chapter one of this project, Rogers' theory has five stages to progress through in the innovation process. The feedback obtained from HCPs in the project confirmed the HCPs believed they possessed a basic knowledge related to alternative and complementary pain management. Even though some knowledge of alternative and complementary pain management is possessed, there may not be adequate knowledge for HCPs to feel comfortable explaining the options to their patients. The lack of sufficient knowledge is something Suman et al. (2017) describe as being a reason HCPs decline to recommend alternative or complementary treatments. The videos, references, and information pinned in the comments section of the video website sought to improve the knowledge already possessed by HCPs and reduce the likelihood of rejection of the innovation. The persuasion stage was believed to have been entered when the tool was offered to the providers. It is believed the persuasion portion of the project was not as successful as anticipated. Only a small portion of HCPs responded to the initial or subsequent email. The seven HCPs who chose to participate progressed to the decision stage of Rogers' theory. It is unknown if adoption or rejection will ultimately occur, although participation in the project was deemed a confirmation to adopt these

practices into their own clinical applications. The implementation and confirmation stages of the theory were not clearly accomplished through the communication emails.

Evaluation of Logic Model

The proposed logic model had a project goal of delivering HCPs an alternative or complementary pain management tool to utilize with their patients. The method of delivery was accomplished by providing the videos and QR codes (Appendix E). Inputs and activities were achieved by producing and providing HCPs the videos and handouts. Providing these resources to the HCPs and receiving their feedback was also accomplished with the project. It is proposed the external factor of HCP bias may have limited participation in the project. The outcomes in the logic model were only partially realized, with one short-term outcome being accomplished by providing a convenient tool for pain relief. The remainder of the short-term and all the long-term outcomes go on to have the potential of being achieved if and when the HCPs utilize the final videos with their patients. Ultimately the logic model seemed to depict the relationship of the project to the desired effects.

Limitations

Possible limitations may have occurred due to the change project not being a local facility policy. In the literature review, Presseau et al. (2017) stated local policy can improve acceptance of change. On the part of HCPs, motivation may have been decreased by asking them to spend their time reviewing a change project not initiated by their facility. Consequently, if the change project had been implemented through the HCP's organization, it may have resulted in more participation. There is the possibility of bias being introduced by the author in the interpretation of the feedback. The likelihood

of bias was increased in the case of HCP 4, as his remarks were taken via phone conversation and not directly from his own writing. It is thought that more precise feedback could have been obtained with a questionnaire asking specific thoughts about the videos.

Implications for Future Projects

In the future, a similar change project could provide specific survey questions for HCPs' feedback. The questions could allow for more uniform and concrete responses to evaluate. Teaming with a healthcare facility's education department may increase HCPs' motivation to participate. Incorporating a change project through a facility's management team could prove helpful and possibly increase participation.

Implications for Practice/Health Policy/Education

While websites and QR codes can be beneficial and easy for some patients to use, not all patients understand how to utilize the technology or may not have a device with internet capability. For this reason, a provider's clinic waiting rooms or patient rooms may be an ideal place to offer the patient teaching videos. Many HCPs' clinics have health information videos playing while patients wait. The alternative and complementary pain tools could be a part of the stream of video continually educating patients. In the literature review, Suman et al. (2017) learned that patients felt early introduction to a pain intervention proved to be the most useful. Providing the video in a waiting room setting could be a valuable introduction to these tools, as a person cannot predict when or if they will have pain in the future. The benefit is that even those patients without pain issues would be made aware of these alternative and complementary

therapies. Then, if the need should arise for them, they would have some previous familiarity.

Conclusion

Finding other alternatives to using opioids is at the forefront of our healthcare today. Finding ways to reduce opioid use is something we need to continually be aware of when caring for our patients. Any licensed or non-licensed staff member could present the video tools. In addition, videos or literature presented in the change project can be available to patients in written form or video when no healthcare provider is present. It only requires the initial setup or initiative on the part of a staff member. The benefits of alternative and complementary pain management information are numerous and can affect many aspects of a patient's life. It is envisioned that providing alternative and complementary pain management tools will lead to a reduction in addiction and overdose and possibly improve some social and family issues.

References

- Alvarado, A. M., & Salazar, A. M. (2015). Adaptation to chronic benign pain in elderly adults. *Investigacion & Educacion en Enfermeria*, 33(1), 138–147.
<https://doi:10.17533/udea.iee.v33n1a16>
- American Music Therapy Association. (2021). *How to find a music therapist*.
<https://www.musictherapy.org/about/find/>
- Anderson, T. (2017). Curbing prescription opioid dependency. *Bulletin of the World Health Organization*, 95(5), 318-319. <https://doi:10.2471/BLT.17.020517>
- Arbab Kash, B., Spaulding, A., Johnson, C. E., & Gamm, L. (2014). Success factors for strategic change initiatives: A qualitative study of healthcare administrators' perspectives. *Journal of Healthcare Management*, 59(1), 65–81. <https://doi-org.library.pittstate.edu/10.1097/00115514-201401000-00011>
- Becker, W. C., Dorflinger, L., Edmond, S. N., Islam, L., Heapy, A. A., & Fraenkel, L. (2017). Barriers and facilitators to use of nonpharmacological treatments in chronic pain. *BMC Family Practice*, 18, 1–8. <https://doi-org.library.pittstate.edu/10.1186/s12875-017-0608-2>
- Bradt, J., Norris, M., Shim, M., Gracely, E. J., Gerrity, P., & Shim, M. (2016). Vocal music therapy for chronic pain management in inner-city African Americans: A mixed methods feasibility study. *Journal of Music Therapy*, 53(2), 178-206.
<https://doi:10.1093/jmt/thw004>
- Centers for Disease Control and Prevention. (2021, March 25). *The drug overdose epidemic: Behind the numbers*.
<https://www.cdc.gov/drugoverdose/data/index.html>

- Chandran, P., & Binutha, V. P. (2020). Effectiveness of video assisted teaching on knowledge regarding home care management among patients diagnosed with acute coronary syndrome. *Indian Journal of Public Health Research & Development*. 11(3), 352-357. doi:10.37506/ijphrd.v11i3.1150
- Davis, C., Green, T., & Beletsky, L. (2017). Action, not rhetoric, needed to reverse the opioid overdose epidemic. *Journal of Law, Medicine & Ethics*, 45, 20-23.
<https://doi.org/10.1177/1073110517703310>
- Devare Phadke, S. S., Parkar, H., & Yardi, S. (2014). Effect of music intervention on immediate post-operative coronary artery bypass graft surgery (CABG) patients. *Indian Journal of Physiotherapy & Occupational Therapy*, 8(4), 106–111.
https://www.researchgate.net/publication/284454222_Effect_of_Music_Intervention_on_Immediate_Post_Operative_Coronary_Artery_Bypass_Graft_Surgery_CABG_Patients
- Garland, E. L., Hudak, J., Hanley, A. W., & Nakamura, Y. (2020). Mindfulness-oriented recovery enhancement reduces opioid dose in primary care by strengthening autonomic regulation during meditation. *American Psychologist*, 75(6), 840–852.
<https://doi.apa.org/doiLanding?doi=10.1037%2Famp0000638>
- Gilmore, A. K., Walsh, K., Frazier, P., Ledray, L., Acierno, R., Ruggiero, K. J., Kilpatrick, D. G., & Resnick, H. S. (2019). Prescription opioid misuse after a recent sexual assault: A randomized clinical trial of a video intervention. *American Journal on Addictions*, 28(5), 376–381.
<https://doi.org/10.1111/ajad.12922>

- Gunty, A., Van Ness, J., & Nye-Lengerman, K. (2019). Be a change agent: Tools and techniques to support organizational and individual transformation. *Journal of Vocational Rehabilitation*, 50(3), 325–329. <https://doi-org.library.pittstate.edu/10.3233/JVR-191014>
- Hamlin, A. S., & Robertson, T. M. (2017). Pain and complementary therapies. *Critical Care Nursing Clinics of North America*, 29(4), 449–460. <https://dx.doi.org/10.1016/j.cnc.2017.08.005>
- Harvard Health Publishing. (2011a). *Medical dictionary of health terms: A-C*. <https://www.health.harvard.edu/a-through-c>.
- Harvard Health Publishing. (2011b). *Medical dictionary of health terms: J-P*. <https://www.health.harvard.edu/medical-dictionary-of-health-terms/j-through-p#M-terms>
- Krebs, E. E., Carey, T. S., & Weinberger, M. (2012, July 17). *Accuracy of the pain numeric rating scale as a screening test in primary care*. <https://www.rwjf.org/en/library/research/2007/01/accuracy-of-the-pain-numeric-rating-scale-as-a-screening-test-in.html>.
- Krishnaswamy, P., & Nair, S. (2016). Effect of music therapy on pain and anxiety levels of cancer patients: A pilot study. *Indian Journal of Palliative Care*, 22(3), 307–311. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4973492/>
- M, P. F., Gnanadurai, A., Resmi, P., & Benjamin, B. (2020). Effect of video assisted teaching on knowledge and practice in prevention of recurrence of myocardial infarction among post coronary angioplasty patients. *International Journal of*

- Nursing Education*, 12(1), 41–45. <https://doi-org.library.pittstate.edu/10.5958/0974-9357.2020.00009.4>
- McCarron, T. L., Noseworthy, T., Moffat, K., Wilkinson, G., Zelinsky, S., White, D., Hassay, D., Lorenzetti, D. L., & Marlett, N. J. (2019). Understanding the motivations of patients: A co-designed project to understand the factors behind patient engagement. *Health Expectations*, 22(4), 709–720. <https://onlinelibrary.wiley.com/doi/full/10.1111/hex.12942>
- Mehl-Madrona, L., Mainguy, B., & Plummer, J. (2016). Integration of complementary and alternative medicine therapies into primary-care pain management for opiate reduction in a rural setting. *The Journal of Alternative and Complementary Medicine*, 22(8), 621–626. <https://doi:10.1089/acm.2015.0212>
- Moran, K., Burson, R., & Conrad, D. (2017). *The doctor of nursing practice scholarly project: A framework for success*. Burlington, MA: Jones & Bartlett Learning.
- Nursing Theories. (2012). *Gate control theory*. http://currentnursing.com/nursing_theory/Gate_control_theory.html
- O'Rourke, T., Higuchi, K. S., & Hogg, W. (2016). Stakeholder participation in system change: A new conceptual model. *Worldviews on Evidence-Based Nursing*, 13(4), 261–269. <https://doi-org.library.pittstate.edu/10.1111/wvn.12165>
- Oxford English Dictionary. (2021). *Yoga*, n. <https://oed.com/view/Entry/232036?redirectedFrom=yoga#eid>
- Penney, L. S., Ritenbaugh, C., DeBar, L. L., Elder, C., & Deyo, R. A. (2016). Provider and patient perspectives on opioids and alternative treatments for managing

- chronic pain: a qualitative study. *BMC Family Practice*, 17, 1–15. <https://doi-org.library.pittstate.edu/10.1186/s12875-016-0566-0>
- Presseau, J., Mutsaers, B., Al-Jaishi, A. A., Squires, J., McIntyre, C. W., Garg, A. X., Sood, M. M., & Grimshaw, J. M. (2017). Barriers and facilitators to healthcare professional behaviour change in clinical trials using the theoretical domains framework: A case study of a trial of individualized temperature-reduced haemodialysis. *Trials*, 18, 1–16. <https://doi-org.library.pittstate.edu/10.1186/s13063-017-1965-9>
- Ravindran, R., & Binutha, V. P. (2017). Effectiveness of video assisted teaching regarding colonoscopy procedure on knowledge and pre procedure anxiety among patients undergoing colonoscopy. *International Journal of Nursing Education*, 9(4), 116–120. <https://doi-org.library.pittstate.edu/10.5958/0974-9357.2017.00107.6>
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
- Seshan, V., Muliira, J. K., Krishnamurthy, R., & Sivaram, V. (2013). Using a video assisted teaching program to reduce the severity of urinary incontinence symptoms in women. *International Journal of Urological Nursing*, 7(1), 33–42. <https://doi-org.library.pittstate.edu/10.1111/j.1749-771X.2012.01166.x>
- Skage, I., & Dyrstad, S. M. (2019). “It’s not because we don’t believe in it...”: Headteachers’ perceptions of implementing physically active lessons in school. *BMC Public Health*, 19(1), 1–9. <https://doi-org.library.pittstate.edu/10.1186/s12889-019-8021-5>

- Suman, A., Schaafsma, F. G., Bamarni, J., van Tulder, M. W., & Anema, J. R. (2017). A multimedia campaign to improve back beliefs in patients with non-specific low back pain: A process evaluation. *BMC Musculoskeletal Disorders*, 18, 1–13. <https://doi-org.library.pittstate.edu/10.1186/s12891-017-1551-z>
- Suseelal, T., & John, K. R. (2018). A study to assess the impact of home based education on life style modification among adults with diabetes mellitus at selected villages in Kancheepuram District, Tamil Nadu, India. *International Journal of Nursing Education*, 10(4), 146–150. <https://doi-org.library.pittstate.edu/10.5958/0974-9357.2018.00122.8>
- Treede, R. D., Rief, W., Barke, A., Aziz, Q., Bennett, M. I., Benoliel, R., Cohen, M., Evers, S., Finnerup, N. B., First, M. B., Giamberardino, M. A., Kaasa, S., Kosek, E., Lavand'homme, P., Nicholas, M., Perrot, S., Scholz, J., Schug, S., Smith, B. H., ... Wang, S. J. (2015). A classification of chronic pain for ICD-11. *Pain*, 156(6), 1003–1007. <https://doi:10.1097/j.pain.0000000000000160>
- U.S. Department of Health and Human Services, National Institute of Health, & National Center for Complementary and Integrative Health. (2018a). *Chronic pain: In depth*. <https://nccih.nih.gov/health/pain/chronic.htm>
- U.S. Department of Health and Human Services, National Institute of Health, & National Center for Complementary and Integrative Health. (2018b). *Complementary, alternative, or integrative health: What's in a name?* <https://www.nccih.nih.gov/health/complementary-alternative-or-integrative-health-whats-in-a-name>

- Weisbeck, S., Lind, C., & Ginn, C. (2019). Patient empowerment: An evolutionary concept analysis. *International Journal of Caring Sciences*, 12(2), 1148–1155.
<https://search.proquest.com/docview/2303667241?pq-origsite=gscholar&fromopenview=true>
- Wen Fen Beh, Hashim, M. N., Wan Ju Tan, & Latiff, Z. A. (2018). Music listening intervention vs local anaesthetic cream for pain management in infants undergoing venepuncture: A collaborative trans-disciplinary research. *Journal of Pediatric Research*, 5(1), 1–10.
http://cms.galenos.com.tr/Uploads/Article_16875/JPR-5-1-En.pdf
- Zelaya, C., Dahlhamer, J., Lucas, J., & Connor, E. (2020). *Chronic pain and high-impact chronic pain among U.S. adults, 2019*. NCHS Data Brief, no 390. Hyattsville, MD: National Center for Health Statistics.
[https://www.cdc.gov/nchs/products/databriefs/db390.htm#:~:text=Summary-,Overall%2C%20the%20prevalence%20of%20chronic%20pain%20was%2020.4%25%2C%20and,65%20and%20over%20\(30.8%25\).](https://www.cdc.gov/nchs/products/databriefs/db390.htm#:~:text=Summary-,Overall%2C%20the%20prevalence%20of%20chronic%20pain%20was%2020.4%25%2C%20and,65%20and%20over%20(30.8%25).)
- Zimmaro, L. A., Carson, J. W., Olsen, M. K., Sanders, L. L., Keefe, F. J., & Porter, L. S. (2020). Greater mindfulness associated with lower pain, fatigue, and psychological distress in women with metastatic breast cancer. *Psycho-Oncology*, 29(2), 263–270. <https://doi.org/10.1002/pon.5223>

APPENDIX

Appendix A

Project Explanation and Recruitment Email

Hello, my name is Holli Boyles, and I am a student nurse practitioner at Pittsburg State University. As part of my DNP scholarly project, I chose to design a change project related to pain management and would like to invite you to participate.

My project aims to offer healthcare providers a simple way to introduce alternative therapies for pain relief to their patients. It is as simple as encouraging the patient to view a video on their own time. The project enables healthcare providers to combat the opioid crisis in their communities. It does so by helping healthcare providers introduce patients to an alternative or complementary therapy to help manage their pain. These videos could be well utilized at the beginning or any point of a patient's pain journey.

To participate, you will need to respond to this email to let me know you are willing. I will then provide you with two video presentations for you to review. One video will be related to music therapy, and the other to mindful meditation. Each video will be 5-10 minutes in length, directed towards the patient to introduce them to using the subject matter as a tool to help treat their pain. At the end of the videos, guidance will be provided to access additional information to further knowledge and use these alternative therapies. After viewing these videos, I ask that you provide feedback and agree to potentially use a revised version of the videos with your patients in the future. After receiving feedback, I will incorporate suggestions and modify the videos. I will then provide you with an internet link and quick response (QR) code for the new videos. If

you wish to use the videos in your practice, they can be conveniently provided to your patients.

My target project population is healthcare providers that treat patients with pain complaints. These healthcare providers will need to hold an active professional practice license, such as advanced practice registered nurses, physician assistants, doctors of osteopathy, and medical doctors who regularly treat patients with pain complaints. If you know of another healthcare provider that may be willing to participate in the project, please forward this email to them so that I can provide them with the videos if they wish to participate.

I encourage and invite you to participate in the project by replying to my email at hboyles@gus.pittstate.edu to request the video links or any questions you may have about the project. Thank you for taking the time to consider participating in my project.

Sincerely,

Holli Boyles, RN, Student DNP

Appendix B

Video Link Email

Thank you for agreeing to participate in my DNP scholarly project. Please use the following links to view the two video presentations:

Music link: <https://youtu.be/7Puu-LPx9Ws>

Mindful meditation link: <https://youtu.be/sD8S-GR5h-M>.

After viewing each video, please provide your feedback related to what you believe should be done to improve the videos so that you would be able to utilize them with your patients. Please address all feedback and questions to hboyles@gus.pittstate.edu.

Thank you for taking the time to participate in my project, and I look forward to reviewing your feedback.

Sincerely,

Holli Boyles, RN, Student DNP

Appendix C

Music Video Content Outline

- I. Introduction
 - a. About myself
 - b. Goals of presentation
- II. Standard pain treatments
 - a. Type of treatments
 - b. Not in your control or time
- III. Treatment
 - a. Complementary definition
 - b. Alternative definition
 - i. Speak with healthcare provider
 - ii. Do not stop without permission
 - c. Familiar tool
- IV. Music
 - a. Change mood
 - b. Special memory
 - c. Task enjoyment
 - d. Pleasant distraction
- V. Music therapists
 - a. Practice locations
 - b. Conditions treated
- VI. Studies related to music and pain

- a. Types of pain
 - b. Study results
 - c. Few side effects with music
- VII. How to use music to relieve pain
 - a. Music therapist
 - b. Purposeful use of music
 - c. Use anytime or anywhere
- VIII. Music therapy
 - a. About music therapists
 - b. What is music therapy?
- IX. Explore music options to ease pain
 - a. Sing or hum
 - b. Make an instrument
 - c. Take a lesson
 - d. Just listen
 - e. Your kind of music
- X. Beneficial music
 - a. Make utilization a habit
 - b. Focus on pleasant
- XI. Resources
 - a. Post in YouTube comments
 - b. Types of resources
 - c. Keep music with you for distraction

XII. References

- a. Remember resources
- b. Cost effective and few side effects
- c. Thank you

Appendix D

Mindful Meditation Content Outline

- I. Introduction
 - a. About myself
 - b. Goals of this presentation
 - i. Provide pain management tool
 - ii. Tool patient controls
 - iii. Tool to use in your time
- II. Pain treatments
 - a. Standard treatments
 - i. Drawbacks
 - ii. Other people control
 - iii. Not your timeframe
 - b. New resource
- III. Mindful meditation introduction
 - a. Relate body to mind
 - b. Decrease pain
 - c. Always available
 - d. Your control
- IV. Dealing with pain
 - a. Alternative pain management defined
 - i. Replace current treatment
 - ii. Healthcare provider's permission

- b. Complementary pain management defined
- V. Mindful meditation options
 - a. Ways to participate
 - b. Variety of vocals
 - c. Background sounds
 - d. Decreasing distractions
- VI. What is mindful meditation?
 - a. Focus
 - b. Pain
 - i. Acknowledge, observe, understand
 - ii. Let go of painful emotion
 - c. Intentional
- VII. Pain is real
 - a. Meditation can help
 - i. Survival tool
 - ii. Improve management of pain
 - iii. Strengthen body and mind
 - iv. Use it
- VIII. Important tips
 - a. Safe environment
 - b. Sit up
 - c. Focus on body and thoughts
 - d. Resources

- i. Cost
 - ii. Types of media
 - e. Practice
- IX. Journey through managing your pain
 - a. Practice and time
 - b. Connection
 - c. Other topics
 - d. Tool to keep with you
 - e. Ease your pain
- X. Resources
 - a. Discover more on your own
 - b. List in YouTube comments
- XI. References and thank you
 - a. Thank you
 - b. Spend time with mindful meditation

Appendix E
Video Website and QR Code

Music Video Tool for Pain Relief.

<https://youtu.be/7Puu-LPx9Ws>



Mindful Meditation Video Tool for Pain Relief.

<https://youtu.be/sD8S-GR5h-M>

