4-20-2021

Spirituality and Opioid Addiction Recovery

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NU 712

April 20, 2021

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Acknowledgements

There are so many people I wish to express gratitude to. All of the people are thanked in no special order as each person was integral to my reaching this point in my studies.

Dr. Lisa Whitefield-Harris has been a very patient academic mentor through many of my courses and in helping me to frame this thesis. She was available at all times and offered great help. Cynthia Griffin, MSN was invaluable as my mentor. No matter who I needed to work with or whatever experience I needed she made it happen. I learned a great deal from her and treasure our time together.

A special thanks to Dr. Janice Miller for creating such a great Doctor of Nursing Program. I was constantly challenged and delighted with my coursework and thesis study.

This study would not have happened with the incredible team of talented professionals at Christiana Care. Dr. Stacey Boyer went above and beyond as Principal Investigator and became another wonderful mentor for me. When Dr. Boyer was given a new assignment after the study started but she gave of herself selflessly to complete this research and help me. Dr. Claudine Jurkovitz went to great lengths to assist me with personnel and equipment to complete the study. Her leadership and encouragement was invaluable. Reverend Dutton's participant interviews led to the development of important themes and he was always generous with his time. I valued and appreciated the opinions and advise of our study mentor, Dr. Courtney Slater.

My heartfelt thanks to all of you. Thank you to all of the patients who agreed to participate. May your time help us develop meaningful interventions in the furtherance of opioid use disorder recovery. Thank you also to my spouse who was always patient and supportive.

Abstract

Purpose: Opioid Use Disorder (OUD) is chronic relapsing disease and requires intense rehabilitation. A link between spirituality and addiction recovery. The purpose of this study was to investigate whether addressing spiritual concerns among hospitalized patients with OUD warrants a specific intervention to assist patients with their unique spiritual needs.

Methods: This qualitative-only study recruited fourteen eligible participants and resulted in five qualitative interviews. The FICA Spiritual Assessment Tool© was used to conduct the interviews and all interviews were coded for theme development.

Results: The results of this study demonstrated that spirituality as a phenomenon in addiction recovery can be determined and used for the benefit of the patient.

Implications: Findings from this study will lead to further research on validated interventions that leverage spirituality.

Chapter 1: Introduction and Background

Opioid Use Disorder (OUD) is known as a chronic relapsing disease and requires intense rehabilitation which can include medication-assisted treatment (MAT), and behavioral therapy such as education, self-help, and motivational enhancement projects. Religious coping has been studied in many psychiatric populations but has rarely been utilized for patients undergoing substance use disorder treatment (Medlock et al., 2018). It has been reported that there is a link between spirituality and addiction recovery. Therefore, the importance of spirituality and the unique spiritual needs of patients with OUD in the acute care setting were addressed.

Opioid Use Disorder is currently at epidemic proportions in the United States. The Centers for Disease Control and Prevention (CDC) reported nearly 47,000 drug overdose deaths involving opioids in 2018 (Wilson et al., 2020). Every sector of society has been impacted and rates increased in people greater than or equal to 65 years and also amongst non-Hispanic blacks, and Hispanic populations (Wilson et al., 2020). Data from 2018 showed that 128 people a die a day in the U.S. after overdosing on opioids (National Institute of Health, 2020). This opioid abuse has resulted in many adverse public health outcomes and an increase in patients seeking treatment for opioid addiction. Approximately 20.7 million Americans twelve and older needed treatment for substance abuse in 2017, but only about 19% received treatment (American Addiction Centers, 2020). Both the prevalence and marked increases in morbidity and mortality has made this epidemic a crisis.

Continued study of opioid use disorder is needed to address this epidemic. Many people with OUD also suffer from post-traumatic stress disorder (PTSD) (Danovitch, 2016). According to Patel et al. (2017), PTSD is predominant among people with OUD. Danovitch suggests that the neurobiological pathways underlying OUD and PTSD have significant overlap and those with both OUD and PTSD will have a worse course of illness.

This epidemic is not limited to outpatients as there are growing numbers of admissions to the acute care setting with life-threatening infections, secondary to opioid addiction (Ronan & Herzig, 2016). As more efforts are applied to address inappropriate prescribing of oral opioids, the rate of increase in street purchases of heroin and fentanyl have risen at dramatic rates (Compton et al., 2016) resulting in a greater number of patients with OUD. Baumann et al., (2020) described the devastation resulting from the illicit production of fentanyl mixed with heroin.

Having worked in pharmaceuticals, mainly in the development and sale of opioids for medical use, this researcher has been particularly concerned about the impact on people and society from the non-medical use of opioids. The state of Delaware, like many other states have seen large increased use of opioids and 88% of the reported drug overdose deaths in 2018 involved opioids (National Institute of Health, 2020). Opioid deaths increased from approximately 150 in 2016 to 355 in 2018 (National Institute of Health, 2020).

Life is precious, and as healthcare providers, preserving the quality of life is an essential element of caring for patients. People with Opioid Use Disorder suffer both physically and mentally. It is important to focus not just on the reduction or cessation of opioid use, but on broader dimensions of health such as quality of life. There are complex psychological and physical problems that a patient with OUD suffers from, including family isolation and withdrawal (Krebs et al., 2016). Approximately 60% of patients with OUD relapsed after a psychological intervention and most patients treated with methadone relapse (Stuart et al., 2018). Additional mechanisms for adjunctive treatment must be studied such as psychological therapy, mindfulness training, and other interventions.

Murphy and Polsky (2016) conducted a systematic review of the literature to investigate the enormous economic cost associated with opioid misuse and found a correlation between scarce resources and effective treatment for substance use disorder. Unfortunately, the economic burden results in scare resources and not all new treatments can be evaluated. The Council of Economic Advisors estimated that $696 billion was spent in 2018 on the opioid crisis (Healthcare, 2019, October 28). The societal costs break down to 46% on workplace-related costs, 9% on criminal justice, and 45% on healthcare (Birnbaum et al., 2011). This cost results in scarce resources for substance use treatment providers and payors which makes it difficult to demonstrate the

effectiveness of adoption of new therapies. Economic evaluations of opioid misuse may provide evidence to help stakeholders allocate resources to increase the acceptance of adopting new therapies.

The misuse of opioids impacts every aspect of life from social networks, community, family, criminal activity, and economic burden and the social impact of opioid misuse extends beyond the death rates. It is estimated that the societal costs of substance use disorders are $220 billion annually, equivalent to the cost for obesity or diabetes (Kreb et al., 2017). Theft and crime have been associated with illegal use of drugs as well as an increase in HIV and Hepatitis C related infections (Sandoe et al., 2018). Death rates from opioid misuse continue to increase. One significant, contributing factor relates to the illegally manufactured fentanyl (Vadivelu et al., 2018). Fentanyl is 50-100 times more potent than morphine and may be more than hundreds of times more potent than heroin (Lardieri, 2019). Most people who purchase heroin do not realize that it is laced with fentanyl. They noted that the respiratory suppressive effect of heroin plus fentanyl is more sustained than either drug alone which results in a more profound respiratory depression.

The state of Delaware is reflective of the United States in its rates of OUD. The state is experiencing epidemic levels of drug misuse and illicit fentanyl and other synthetic opioids are the major drivers of overdose deaths (Delaware Health and Social Services, 2019). Delaware ranks ninth in the nation for overdose-related deaths, yet Delaware has less than 1 million citizens, and ranks 45th amongst all of the U.S. in population density (World Population, 2020). This disorder has resulted in an increased rate of Neonatal Abstinence Syndrome among babies born in Delaware, and the increase in opioid misuse has had the same societal impacts as previously described.

Medication-Assisted Treatment has been used for many years and is considered first-line treatment for opioid use disorder (Stuart et al.,2018). Buprenorphine, methadone, and naltrexone are three of the more common medications used. Methadone is an opioid replacement therapy and has demonstrated improvement in the quality of life and longer treatment retention but, relapse is still a significant problem, ranging from 20-70%. Buprenorphine is a partial opioid agonist that provides some level of euphoria on the mu receptor, and has also shown some promise in improvement of quality of life, but relapse rates are higher at 50-90% (Stuart et al., 2018).

Purpose

Interest in the scientific exploration of the association between spirituality and recovery from addiction has been increasing (Selvam, 2015). Miller and Bogenschutz (2007) believed that spirituality offered a protective relationship in that persons with spirituality or religion in their life were less likely to use alcohol or drugs and suggested the need for more robust studies of the phenomenon. Selvam (2015) also pointed out that the link between spirituality and recovery has not been studied within the framework of a theory to identify a clear pattern between recovery and spirituality. Thus, the purpose of this Doctor of Nursing Practice (DNP) study was to explore this link by conducting research to understand the importance of spirituality-religiosity, and the unique needs of patients with opioid use disorder in the acute care setting.

The role of spirituality in alcoholic addiction recovery has been central to Alcoholics Anonymous (AA) since its inception and is regarded for its role in the maintenance of recovery from alcoholism (Dermatis & Glanter, 2015). The authors discussed a study conducted in cooperation with the Narcotics Anonymous (NA) World Service Office exploring the relationship between spirituality and recovery. From this study, 82% of the participants indicated

a spiritual awakening, and felt less depressed and had fewer cravings for substances. It is worth noting that while AA and NA recognize spirituality in recovery they also teach abstinence. Many of the subjects enrolled in this DNP study will utilize Medication Assisted Treatment.

Many patients in substance use treatment programs have identified spirituality and religion as essential to their recovery (Medlock et al., 2017). Anecdotally, psychologists at Christiana Care have witnessed this outcome in the acute medical setting when connecting patients with opioid abuse disorder with their chaplains. Thus, the aim of this DNP study is to further investigate whether addressing spiritual concerns among hospitalized patients with OUD warrants a specific intervention and how providers can assist patients with their unique spiritual needs on the recovery journey. This hypothesis will be tested by identifying the self-reported importance of spirituality among hospitalized patients with OUD, identifying styles of religious coping, and determining the preferences for and types of spiritual-religious needs of hospitalized medical patients with OUD.

Study Aims

Three aims existed in this DNP study and included:

- Identification of the self-reported importance of spirituality among hospitalized medical patients with OUD.
- Identification of the styles of religious coping among hospitalized medical patients with OUD.
- Determination of the preferences for and types of spiritual-religious needs of hospitalized medical patients with OUD.

Assumptions and Limitations

The underlying assumption of this study was that most patients would define spirituality-religiosity as important in their life. This study led to a more in depth understanding of the unique spiritual and religious needs of patients, and ultimately, toward the development of interventions for hospitalized patients with OUD. One common concern about qualitative research is external validity, as this research is often conducted by one investigator with a relatively small sample in the absence of a control group. To increase validity, multiple coders, triangulation, and peer review were used.

Chapter 2: Review of the Literature and Theoretical Framework

Chapter two included a review of definitions used in the DNP study: Spirituality and Opioid Addiction Recovery, and discussed literature related to spirituality and addiction. This chapter concludes with a description of the theoretical frameworks for this DNP study.

The purpose of the DNP qualitative study was to understand the importance of spirituality-religiosity (S-R), and the unique spiritual needs of patients with Opioid Use Disorder (OUD) in the acute care setting. This distinction between spirituality and religiosity was not essential to this study, yet literature does describe them differently. Spirituality is defined more by how people express and seek meaning, purpose, and transcendence in their life, and is differentiated from religion. Religion is more organized with beliefs and rituals tied to an institutional structure such as Catholicism or Buddhism. (Cleary & Donahue, 2018). Religious coping describes how individuals employ religion or spirituality to understand and deal with the stress of recovery (Medlock et al., 2017). There is both positive and negative religious coping, as described in the literature, and positive coping may be associated with a belief that God is supportive and is characterized by individuals seeking support from God. Negative coping is

associated with spiritual struggles and feelings of abandonment or punishment (Medlock et al., (2017).

Substance Use Disorder is defined in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, n.d.) as a problematic pattern of opioid use leading to problems or distress, with at least two of the following occurring over 12 months:

1. Taking drugs longer than prescribed and in larger doses,
2. Inability to cut down or control opioid use and an obsession with obtaining the drug;],
3. Craving the opioid,
4. Inability or problem with daily activities, including work,
5. Problems with social interaction, yet continued use of opioids,
6. Taking opioids in favor of participation in usual activities,
7. Taking opioids when hazardous situations exist,
8. Using opioids despite worsening physical or psychological issues,
9. Tolerance,
10. Experiencing withdrawal

While opioid use disorder is similar to other substance use disorders in many respects, such as physical and psychological symptoms, the disorder has several unique features. Opioids can lead to physical dependence within a short time, as little as several weeks (John Hopkins, n.d.). Chronic users of opioids will experience severe symptoms if they abruptly stop taking opioids, which could create motivation to continue using opioids to avoid withdrawal (American Psychiatric Association, n.d.).

Review of the Literature

Search Strategy

The starting point for the literature review included the articles referenced in the grant request for the DNP study. Nineteen articles were referenced in the grant request and of those, only eight were included in the literature review following this section. A number of those articles not included were dated. Subsequently, additional searches were completed to find more current material on the topic. Databases searched included PubMed, Scopus, PsycInfo, and CINAHL; and keywords included religiosity, spirituality, addiction, and opioid addiction alone and in various combinations. Additional articles were found amongst the references in the articles pulled from the above-referenced searches.

Inclusion criteria were articles published in the last five years, peer-reviewed, English language and full text. Articles that dealt with addictions other than alcohol and opioid addiction were excluded. There are similarities in spirituality in both alcohol and opioid abuse, so it was important to include studies that discussed alcohol abuse. Articles that were more than ten years old, but part of the grant request were included as were articles considered seminal.

Literature Synthesis

Twenty-two articles and two books were reviewed. They are discussed in two sections. The first review focused on articles that discussed spirituality and addiction, and the potential for treatment. The second section reviewed qualitative studies in the addicted population, two of which addressed spirituality in the context of healthcare workers treating patients in recovery. All of the articles provided a rich background for consideration in studying patients in addiction treatment and informed the DNP study.

Discussion of Articles on Spirituality and Addiction

Nine articles and two books that focused on spirituality and addiction were reviewed. Most articles did not distinguish between spirituality and religiosity but recognized the importance of inclusion of this phenomenon in patient care. The American Psychiatric Association (n.d.) pointed out that more than 72,000 Americans died from overdoses in 2017 and that only 1 in 4 people with Opioid Use Disorder received specialty treatment. The consensus amongst all authors was that religion is more tied to organizations and their rituals, whereas spirituality is tied to a broader sense of self in relationship with the external environment (Vincensi, 2018). Rosmarin (2018) articulated the need for clear and practical instruction on how to include spirituality and religiosity (S-R) into cognitive behavioral therapy (CBT) and, Vincensi (2018) discussed the interconnection between spiritual care, patient-centered care and specialty care nurses. She emphasized that nursing needs to understand the connectedness in order to build a conceptual framework for their practice that incorporates spiritual care.

Although religion and spirituality have been aspects of various cultures throughout time, there has been little scientific inquiry into this phenomenon (Rim et al., 2018). Park et al. (2016) supported this view and indicated that the multidimensional aspects of the phenomenon present challenges that may deter research. He discussed the need to understand how SR can influence health and the need for additional studies.

S-R coping can be both positive and negative, where positive coping may surface as asking for God's support in recovery or praying to a higher power for strength. Patients who see addiction as God's punishment experiences negative coping. Multiple researchers discussed different aspects of coping (Vincensi, 2018, Rim et al., 2019, Grim and Grim, 2019, Beraldo et

al., 2019, and Dermatis and Galanter, 2015). Vincensi (2018) noted the power of self-connection within the spirituality framework leading to enhanced coping and hope, and Rim et al. (2019) held that S-R helps people cope with life's stressful events. Grim and Grim believed that S-R is the single most critical factor in the recovery of people suffering from substance abuse disorder and that positive coping skills lead to better outcomes for patients in recovery. Beraldo et al. (2019) held that positive coping skills could lead to high motivation and coping in recovery. Dermatis and Galanter (2015) discussed Pargament's religious coping model in the context of the Alcoholics Anonymous 12-step program. The authors concluded that there was no direct relationship between positive coping and the number of steps completed but that a positive relationship existed between coping and abstinence. Dossert (2017) suggested that the Alcoholics Anonymous (AA) language may appear religious but could be framed in psychological or affective terms. The author suggested that success in abstinence in AA is about the program's discipline and the ability of individuals to reconnect with family to achieve self-efficacy.

Several authors concluded that spirituality is particularly vital in minority populations. Beraldo et al. (2019) said that the influence of spirituality is not equally significant for all populations and is more important for minority populations. Waters (2019) discussed the dynamics of culture, race, gender, and theological background which impacts pastoral care in recovery, and that these dynamics may improve or sabotage capacity for recovery assistance. For instance, the author suggested that counselors may have less emotional and cognitive empathy for distress when it comes from unfamiliar cultural norms. Grim and Grim (2019) indicated that spirituality might be particularly useful for minority populations in the United States and rural areas, which was also pointed out by Beraldo et al. (2019).

Qualitative Studies

Thirteen qualitative studies examined S-R concerning addiction. Two of the articles focused on the healthcare worker attending to patients in recovery. The studies reviewed included patients in current recovery programs as well as patients who have been abstinent and included both inpatient and outpatient participants. Noormohammadi et al. (2017) studied 312 subjects to determine whether S-R is a factor in relapse among opioid addicts, while Stokes et al. (2018) focused on 15 individuals who were abstinent for three years to gain an understanding of how patients can maintain their abstinence from substance use. Both studies spoke to the phenomenon of S-R, and Stokes et al. (2018) believed that the adoption of a spiritual theme in one's life is paramount to maintain abstinence. Noormohammadi et al. (2018) also believed that S-R was central to abstinence and that it is a protective factor and also a coping resource. Many of the studies evidenced religious coping as a central theme to recovery. Puffer et al. (2012) discussed the importance of identifying psychosocial factors to inform behavioral therapy. He studied religious coping and 12-step participation in opioid use disorder and found that religious coping is a significant predictor of health outcomes. Medlock et al. (2017) pointed out the lack of research into the phenomenon of S-R, particularly in substance abuse disorder. The authors believed that positive religious coping could lead to the adoption of self-help techniques.

Another dimension of recovery characterized the need for hope and the elimination of emptiness or loneliness in one's life. Yaghubi et al. (2019) approached this phenomenon as a spiritual emptiness and one of the most important factors leading to relapse. The authors studied 72 patients in methadone treatment randomized to an intervention and a control group. The intervention group received eight 90-minute sessions of spiritual and religious training. They

concluded that a much higher spiritual quality in one's life leads to more successful treatment in opiate dependent individuals. Along the same line, Arnold et al. (2002) studied HIV patients with opioid-addiction and conducted three focus groups to understand how spirituality influenced their recovery. Two themes emerged from the study, one with spirituality as a protector of self and the second as altruistic that benefits others. In the case of self-protection, spirituality gave the participants the strength to deal with their mortality while altruism addressed protecting others by reducing risky sexual behavior.

Both Jalali et al. (2019) and Lashley (2018) discussed the power of faith-based interventions and the role that self-esteem plays in recovery. Jalali et al (2019) concluded that spirituality was a predictor of hope, and increased hope raised self-esteem. In the same vein, Lashley (2018) studied a faith-based recovery program among homeless men and the impact that spirituality played with hopelessness and self-esteem. She concluded that there was a connection to spiritually based programs that increased hope and self-esteem. Similarly, Haroosh and Freedman (2017) presented that the feeling of existential emptiness might lead to the use of drugs. In the study they evaluated the willingness of patients to participate in a 12-step program with an emphasis on spirituality. The authors employed a Process to Change model and used questionnaires to examine posttraumatic growth, perceived social support, and willingness to seek help. They concluded that recovery growth was associated with the patient's willingness to participate in 12-step programs, and that perceived social support was a predictor of growth.

In a not so different approach, Schoenthaler et al. (2017) concluded that spirituality lowered deviance from social norms by preserving norms and social bonds. Their study was designed to measure outcomes of adults in four types of programs, residential outpatient, long-term

residential, short-term inpatient, and outpatient methadone. Interviews measured outcomes at 1,3,6, and 12 months after entry. The hypothesis predicted the impact of spirituality on relapse and was measured by five different categories of spirituality. They concluded that an increase in remission from all drugs occurred more frequently when spirituality was high versus absent. Amongst all patients, the percent of patients achieving remission rose as the percent of patients with spirituality rose.

Aliakbarzadeh et al. (2019) studied spirituality from the perspective of preempting the use of drugs. He chose students in medical school and allied health fields and suggested that promoting spirituality and religion early in their education would reduce the risk of the students' potential use of drugs. Their premise was that religion would help students develop beliefs and attitudes that could reduce stress and prevent high-risk behavior.

Two articles focused on spirituality from the perspective of healthcare workers. Cleary and Donahue (2018) conducted a qualitative study by interviewing five healthcare workers, each of whom had ten or more years of experience in addiction medicine. The researchers explored information about addiction, recovery, and spirituality and the impact on the workers in the field of addiction. The researchers found that there was an impact on the healthcare worker when spirituality is included, and three themes developed: being constructive, productivity, and managing therapeutic ruptures. The healthcare worker was much better equipped to manage all issues that arise from the person with the addiction, that their work is enhanced, and a greater sense of productivity exists. Much like Cleary and Donahue (2018), Olivieira, et al. (2020) conducted a semi-structured interview with 14 health professionals. The researchers found that

few healthcare works were sufficiently trained to address spirituality needs but that discussing the subject in interviews prepared the workers to include spirituality in daily care.

Limitations

Consistent themes that was noted across all of the literature was a need for more studies to demonstrate the effectiveness of spirituality and religion in treating patients who are opioid-dependent and the need for interventions for care. Many of the articles addressed the need for additional studies outside of the US and more studies with minority populations. Several studies, including Arnold et al. (2002), Lashley (2017), Puffer (2018), Yaghubi (2019) and Stokes et al. (2018) discussed small sample size as a limitation. Also, the studies were not randomized, which could not be generalizable to the broader population. Grim and Grim (2019) specifically addressed the concern that state and federal agencies have about funding studies involving spirituality and religion and the need to address this lack of funding as a health imperative. Clearly the paucity of articles demonstrating robust studies in the recovery population suggests a need for further research.

Theoretical Framework

Grounded Theory

The purpose of this qualitative study was to understand the importance of spirituality-religiosity (S-R), and the unique spiritual needs of patients with Opioid Use Disorder (OUD) in the acute care setting. Participant interviews were analyzed using Giorgio's (1997) empirical phenomenological method and the constant comparative method of grounded theory, as developed by Rennie, Phillips, and Quartarro (1988) and Glasser and Strauss (1967).

A phenomenological approach to spirituality in OUD was selected to study spirituality in OUD in the acute care setting. The approach as defined by Giorgi included five concrete steps, collection of verbal data through interview, reading of the data, breaking the data down, expression of data, and synthesis of data (Giorgi, 1997).

In this DNP qualitative study, the researcher collected and analyzed data using grounded theory (GT) as a qualitative research method to develop theory. Glasser and Strauss (1967) are considered the founders of this theory and developed it while they were studying terminally ill patients, some of which knew they were dying while others were unaware. Chun et al. (2019) discussed Glasser and Strauss's reluctance to use a scientific method to examine how patients dealt with the understanding of their impending death.

Glasser and Strauss (1967) also challenged the thinking of the time that qualitative research lacked rigor and subsequently developed the constant comparative method, which is considered to be an original way of analyzing qualitative data. Glasser and Strauss (1967) considered their coding and recoding to be a part of the constant comparative technique which they then used to develop theory. Primarily, the research focused on the development of conceptual theories through inductive analysis from the data. The process is quite rigorous and begins with a sampling technique, followed by data analysis, and several iterations of coding using constant comparison. This sampling continues until no new themes emerge, or saturation is achieved.

During the initial analysis, codes are compared to others, and categories of themes are delineated. Coding in Grounded Theory is a cyclical process, and the coder will move back and forth between different phases of coding. First, open coding includes raw data that is broken into

discrete parts, and concepts are identified. Concepts from future codes are compared to other initial concepts. Once saturation is achieved, a theory can be postulated as noted in Appendix A.

Chapter 3- Methodology

Project Design

The originally proposed qualitative study planned for 12-15 interviews to investigate the link between spirituality-religiosity (S-R) in patients with opioid use disorder (OUD) in an acute medical inpatient service. No research exists concerning the unique S-R needs of these patients in the acute medical setting. The study design was intended to identify the prevalence of S-R in this population, their common styles of religious coping, and specific spiritual needs. The long-term follow-up objective of this study is determination of hospital spiritual support interventions.

The project was led by Stacey Marie Boyer, PsyD who supervised the work, guided progress, and ensured goals were achieved. Dr. Boyer was involved in all aspects, including patient recruitment, interpretation of the results and submission of grant, abstracts, and manuscripts. She also managed the analysis, conducted patient interviews, data review, and analysis. Carol A. Ammon, MBA, BSN, MSN, and Tobi James, BSN, RN determined which patients were eligible to participate in the study and asked each one the importance of spirituality-religiosity in their life. Carol A. Ammon also assisted with coding of recorded discussions under the direction of the principal investigator and according to the protocol.

Rev. Steven Dutton is the manager of pastoral services at Christiana Care. Rev. Dutton advised the team on spiritual assessment tools, conducted interviews, and participated in data review and analysis. Terry Horton, MD, is the Director of Addiction Medicine at Christiana Care and the Associate Director of the Behavioral Health Service Line. He is a clinical mentor for the study. He worked closely with Dr. Boyer and provided clinical guidance on patient recruitment,

clinical interpretation of results, and development of submissions for future grants. Claudine Jurkovitz, MD, MPH, is a Sr. Physician Researcher at the Value Institute at Christiana Care. Dr. Jurkovitz has extensive experience in epidemiological and outcomes research, including the area of addiction, and guided Dr. Boyer and the team to conduct the study, to report the results, and to plan for the future grants.

Courtney Slater, PhD., professor of psychology at a Delaware university, consulted with Dr. Boyer regarding existing spirituality research/literature, research methodology, data review and analysis, and assisted in the development and submission of manuscripts.

Setting

The study was conducted at two Christiana Care hospitals, a medical system in Delaware. One hospital is located in Wilmington, DE, and the other in Newark, DE. Christiana Care (CC) is a teaching hospital affiliated with Sidney Kimmel Medical School, Philadelphia, Pa. and also has more than 260 residents. CC is a network of outpatient services and three hospitals with over 1,500 beds. It is a Level 1 trauma center and a Level III neonatal intensive care unit. Christiana Care also has a comprehensive stroke center and regional centers of excellence in cancer care, heart and vascular, and women's health. CC is a not-for-profit hospital.

In 2017 61% of the overdose-related deaths in the state of Delaware involved fentanyl or heroin, and there was a 12% increase from 2016 in overdose-related deaths (Delaware.gov, 2018). An internal audit at CC indicated that 4,126 patients with OUD were admitted in 2017. Delaware, like the rest of the United States (U.S.), is in the midst of an opioid epidemic.

Recruitment

The two research nurses assigned to this study determined a patient's eligibility for the study. When a patient was admitted to the acute medical inpatient service and received a Clinical

Opioid Withdrawal Score (COWS) of ≥8 as documented in the electronic health, an email was automatically generated and sent to select individuals including members of the project team for this study. The COWs assessment tool was developed by nursing to assess a patient's level of withdrawal from opioids (Canamo & Tronco, 2019) and used at numerous institutions. Patients had to be ≥ 18 years old, English speaking, alert and oriented x 3 with no evidence of dementia or delirium and have a history of IV opioid use within the prior three months. Patients who were < 18 years old and or pregnant, and or exhibiting withdrawal solely from the use of opioid medications were excluded. If eligible, the patient was assigned a study number and entered in REDCap ™, a web-based HIPPA-compliant electronic data capture system which this researcher was trained to operate. REDCap™ was developed by researchers for clinical studies, is easy to use, and accommodates different access privileges. It has built-in capability to minimize errors and has a fully transparent tracking system (Harvey, 2018). Signed consent forms were stored in locked cabinets with only study personnel access.

Once a patient was deemed eligible, the Research Nurse visited the participant in their hospital room and asked them item five of the FICA Spiritual Assessment Tool© (Puchalski, 2010; Borneman et al., 2010): **"**On a scale of 0 (not important) to 5 (very important), how would you rate the importance of faith/belief in your life?" If the patient answered 3 or higher, they were asked if they would be willing to participate in an interview to gain an understanding of the spiritual needs of patients with Opioid Use Disorder (OUD). If so, this affirmative reply was recorded in the REDCap™ and the Principal Investigator or Co-Investigator (chaplains) conducted a qualitative interview. The preferences for, and types of S-R needs, of hospitalized and medical patients with OUD, were explored by conducting in-depth semi-structured

interviews with approximately 5 patients. Purposive sampling continued until the study was suspended.

There were, however, a number of methodological changes to the plan that resulted from Covid-19. Originally, this was a mixed-methods study; approximately 200 patients deemed eligible to participate would complete questionnaires using Likert-type scales to determine the nature and prevalence of spirituality in their lives. Of those 200, approximately 12-15 would be interviewed using an empirically validated semi-structured interview focused on spirituality. Research was suspended in March 2020 as the result of Covid-19. Once it was clear that the study would not resume in time for this DNP submission, the researcher completed the research as a qualitative-only pilot. The total number of patients screened prior to suspension of the study was 100. Of those, 51 were eligible to participate, 14 participants were enrolled. All fourteen people were interviewed by the research nurse(s) to assess the importance of spirituality in their life and their willingness to be interviewed by a chaplain. One participant was unwilling to answer the FICA assessment tool question but 13 agreed to a chaplain-led interview and 5 were completed. Information on patient demographics can be found in Appendix B, tables 1-2. Thus, five studies were coded. Although saturation was not reached, this pilot study yielded information that will be useful in the development and validation of interventions in the acute care setting. The researcher plans to continue the study post-graduation, once the clinical site permits resumption of the study.

Human Subjects Protection

This study was granted approval by the Institution Review Board at Christiana Care, and the Board was responsible for compliance with all aspects of such. Once a subject verbalized that spirituality-religiosity was important to them, they completed a consent form before continuing

in the study. A patient bill of rights was given to each patient and they were advised that they could discontinue participation at any point. As discussed above, consent forms were stored in locked file cabinets with access limited to project team personnel.

Data Collection

A chaplain or the principal investigator met with the patient to obtain informed consent (appendix C) and provided the patient with a copy of the signed consent form prior to conducting the interview. Participants were informed that they did not need to answer any question that made them uncomfortable and could stop at any time. The interview started once the informed consent was signed. Also, subjects were interviewed in their hospital room on an acute care patient floor where medical intervention was present, if needed.

Qualitative methods were used to identify the S-R preferences and the needs of hospitalized patients with OUD. This methodology allowed participants to express their subjective experience of S-R in their own words.

The FICA Spiritual Assessment Tool ©, a semi-structured process for conducting interviews was used and allowed participants to share their personal views and provide qualitative data that could lead to a deeper understanding than that from the quantitative study data alone. There was at least one question from each of the four FICA domains. First, F for faith, belief and meaning to understand the subject's spirituality or religiosity. Second, I for importance or influence. The chaplain probed to understand what importance faith or belief has in the subject's life. A question about C- community determined if the subject was part of a spiritual or religious community, and finally, the chaplain asked how they address (A) spiritual or religious issues in the subject's health care.

All interviews were recorded on a secure device and transferred to a HIPAA-compliant,

password secured, and encrypted file. Interviews were transcribed by this Research Nurse and the Principal Investigator. All transcriptions were entered into a word processor on a password protected laptop and personal identifiers were excluded. Recordings and transcriptions will be destroyed at the completion of the study.

There was not any compensation for participation in the study. To avoid any undue influence, current patients of the PI or Co-I's were excluded from the study.

Analysis

Once transcribed, the interviews were analyzed with NVivo 12 software designed for unstructured data. The transcripts were coded independently by the PI and this Research Nurse and compared for theme identification. The coding process consisted of reading each line of text and assigning labels that described the text. Each similar line of text was assigned the same label. This was an iterative process that often required the coder to review and revise previous codes (see Appendix D). Once all of the text was coded, it was sorted into categories where similar codes were grouped together. Themes emerged from the categories. Triangulation improved the reliability and validity of the results by using multi-disciplinary stakeholders to confirm the interpretations. The individual categories and overarching themes were reviewed by the research team to determine if the results were consistent with the interview transcription data.

Eight verification procedures were employed as follows:

- Prolonged engagement and persistent observation,
- Triangulation,
- Peer review/debriefing,
- Negative case analysis,
- Clarifying researcher bias,

- Member checks,
- Rich, thick description, and
- External audits

Timeline and Budget

The first eligible subject was entered in REDCap™ on December 16, 2019, and the first qualitative interview was completed on January 29, 2020. A total of 100 subjects were screened and 14 were enrolled. The last subject entered into REDCap™ before the study was suspended was completed 3/19/2020, and the fifth, and last interview occurred on 3/16/20. In response to increased demands on staff and patient needs during the Covid-19 pandemic, the study was temporarily suspended on 3/24/2020. The original budget for the initial budget period included direct costs only and was projected to be approximately $80,000 prior to suspension of the study. (see Appendix E).

Research Tools

Tools used in this DNP project included the Clinical Opiate Withdrawal Scale (COWS) and the FICA Spiritual Assessment Tool ©. The Clinical Opiate Withdrawal Scale (COWS) was developed to measure levels of withdrawal (Wesson & Ling, 2003). Wesson and Ling (2003) discussed the history of opiate withdrawal scales and their context of use. The increased development of drugs used in recovery necessitated a tool that could adequately measure withdrawal which is a function of the severity of dependence as well as occupancy on the mu opiate receptor at a point in time. It is critical that a drug that could precipitate withdrawal not get introduced while a patient is severely opioid dependent.

The FICA Spiritual Assessment Tool © is the only empirically validated assessment instrument developed for medical providers to assess patient's S-R needs in clinical settings ((Puchalski, 2010; Borneman et al., 2010).

Chapter 4: Results

In this chapter the results of the DNP study are presented that identify the self-reported importance of spirituality among hospitalized patients with opioid use disorder (OUD) and identify styles of religious coping. Preferences for and types of spiritual-religious needs of hospitalized patients are summarized.

Findings

In this section findings will be reviewed by themes that emerged following coding. In accordance with the framework of empirical phenomenology and grounded theory, all five interviews were coded and yielded 157 references. Triangulation of data was used to resolve coding discrepancies. Multiple coding sessions resulted in 15 first-order themes from which 7 categorical themes were created (See Appendix F, table 1).

Throughout this study participants shared their lived experiences of addiction; health and hospitalization; relationship with a benevolent higher power; felt benefits of spirituality; largely conflict-laden relationships; and important supports. All participants interviewed characterized the importance of faith/belief as a 3, 4, or 5 on the Likert scale of 0-5 where 0 is not important at all to 5 which is very important. Thirteen of the fourteen participants answered as to the importance of faith/belief in their life and one participant elected not to answer. The thirteen responses are shown in Appendix G, table 1. The themes described below provide evidence of

the powerful struggles of the participants to understand their addiction and to seek God's help to persevere and improve their lives.

The major themes and subthemes are summarized below:

Experience of Addiction, Health & Hospitalization

Desire for recovery

All five participants spoke of a desire for recovery; motivated to care for family, and for self.

"It's all on me. A grown person's goin' do what he wants. I know what I want. I don't want to put my family through it anymore." (Timothy)

"Well as of now, yeah, I want to try to make it like I'm making is so I'm making the right decisions. Not just for me, but for my son, for God." (Jasmine)

Experience of Hospitalization

Participants were asked about incorporating spirituality into healthcare. It was clear that several of them understood the gravity of their healthcare situations resulting from addiction.

The interviewee asked the participants how they would like the healthcare providers to address their spirituality, if any, in their healthcare?

"I would need to better understand the religions, different religious beliefs, that way I can know what ways I can grow when I get out of here, if I want to go to church and know where I want to go" (Jasmine).

Regarding the participant's family situation and if it played to those issues, the decisions that they made, and if that played into those life types of decisions.

"Yeah, I would say they do. Do we necessarily talk about it, no not really? With my family growing up, nothing until really this point not a lot of things have been talked about. And that's

not been helpful. So, me being in these situations, all the cards have come out on the table and you know that spiritually will eventually come out and be talked about." (Beth)

Negative impact of addiction

Participants, throughout the interviews spoke of many issues resulting from addiction. The statements expressed by Beth and Jasmine show how they feel that addiction trumps everything.

"So, just that when I was in it [addiction], I couldn't see past it. There wasn't anything else that was important." (Beth)

"I didn't think about, you know, the way I took care of myself, and, and think about God, probably not half the time, when I was in my addiction." (Jasmine)

Experience of MAT and medications

Some participants expressed the desire to be free of medication-assisted treatment (MAT) while other participants were fearful of balancing the need for pain medication post-operatively with their recovery.

*"*My goal is just to be free of everything. I don't like it one bit." (Billy)

*"*And I was on the methadone clinic but and I don't want nothing. I don't want methadone. That's just liquid handcuffs." (Timothy)

Relationship with a Higher Power

Participants each articulated a belief in God. All participants were Christian focused, speaking of God as opposed to other forms of a higher power, such as music, a belief in nature, or in humanity, as examples. Using chaplains to conduct the interviews may have influenced participant's views as Christian-oriented.

Dermatis and Galanter et al. (2020) studied the construct of "God" in the 12-step process and found that only 29.5% of the 45.2% of participants who viewed God, saw him as Christian.

Fifty-four percent of participants viewed something other than God. This broader view of a higher power needs consideration in development of interventions. Of those viewing their higher power as God, 96% believed that God determines what happens to them and 81.3% believe that God talks to them and 98% also talk to God. These beliefs were fairly consistent among participants.

Participants also viewed God as a benevolent God who had saved them and supported them. This is a form of coping. Stephen Dutton (Dutton, S., personal communication, January 28,2021) noted that people in early recovery have a positive view of God that is magical; by simply following the rules that were taught in church everything would turn out okay. Rizzuto explored the mutual relationship between the psychological and spiritual growth in the early stages of addiction and spoke of God imagery playing a positive role in recovery. She also spoke of God imagery growing stronger over the course of recovery, moving from more magical to more trusting (Sloan, 1999). This concept of magical thinking was evidenced by some subjects.

Desire for a relationship with God

"The importance, I mean for me to be connected with Him like. Like forever, you know. To gain His trust, even when like bad things happen. I can't say oh, I give up on God because he let me down cause right after something big might happen for me and then I'm gonna' feel like dumb because I cursed him. I don't ever wanna' feel, you know, not believe in him." (Jasmine)

"And I failed my part of the bargain with the deal." (Angela)

"I don't want that (drugs) to be my God." (Beth)

God Image

Some participants saw God as a provider. "But I know there's a God and I know that he helped out to like a lot of things in my life." (Billy)

Timothy felt saved by God. “I was dead. God’s the only reason I came back. I mean I shoulda died, I should be in box or cremated by now.”

Supports

Religious support as an element of recovery is evidenced throughout the literature. In the context of spirituality, incorporation of a faith-based community in addiction recovery has helped many people. Whereas none of the participants spoke of a direct relationship with a faith-based community, many of the participants had family members or pastors of faith-based communities praying for them. This faith-led community may serve multiple purposes in recovery. The mechanisms of such are that people who go to church are more likely to engage in volunteer work which leads to more interpersonal relationships and more emotional support (Nugraheni & Hastings, 2020). The authors recognized that sharing similar religious values and emotional support from the congregation can lead to less depression, but this idea should be generalizable to addiction recovery.

Thirteen responses from four out of the five subjects were coded as support from family. Family dynamics play a role in every facet of life. Families experience crises, and how they are equipped to cope with those crises will impact family members. While religions may differ on what a God is, religion creates a framework for families to live by, through values, rituals, and beliefs (Mahoney & Tarakeshwar, 2005). Ventura and Bagley, (2017) discuss the need for family-based interventions to improve health outcomes for all family members. These interventions will be discussed in chapter 5.

Participants were queried on supports from family, faith-based communities, or other sources. Responses included lack of support, support from family, other community supports, and support from faith-based community, which will be discussed below.

Lack of support

Participants shared that did not have support systems, like a community to help them in the recovery, however, the respondent spoke of positive supports, such as family and church members expressing support.

Family

"I talk to him [her son] … As a matter of fact, he calls me every single day and talks to me. That's why I got the phone and this and that and he got my other phone." (Angela)

"Well, my mom and dad will support me anything I do." (Beth)

"I mean, all my grandparents and everything and pastors everywhere have traveled from everywhere to see me." (Timothy)

Other community supports

"So Ginger Smith is, she runs a women's group. It meets every other Thursday throughout the month. And that's something I will be attending. Going forward, so that will be." (Beth)

Support from faith-based community

"Yeah, that's why they came up. That's the church I clean and stuff, they came up and brought me books and pens and my prayer blanket right here." (Angela)

Personal Spiritual Coping

Grim and Grim (2019) discussed the effective use of positive spiritual coping (PCR), such as prayer, convictions of religious faith, and belief itself. The authors indicated that participants embracing PCR had an easier time in recovery and were more likely to be productive 12-step program participants.

Spiritual coping took on different forms for participants, including prayer, helping others, reading the bible, and even using a prayer blanket. Praying was consistent among subjects and

included speaking to God and helping others through talking about God. Guilt was evident when one participant admonished herself for asking for God's help only in bad times.

Prayer

On the use of prayer: "I just go, I just wake up every morning, well I pray every night. I have to pray for the whole world. (the whole world?) Yeah, everybody in it …" (Billy)

Personal spiritual practices

Some participants shared that they use personal spiritual practices to cope during recovery. "…. This blanket because when I get upset or anything or anytime, or get thinking about stuff or, I use the blanket." (Angela)

Billy discussed helping others and was asked if that's another way he practices his faith. "Yeah, more or less by helping other people. You try to open their eyes to the Lord." (Billy)

Benefits of Spirituality

Grim and Grim (2019) described faith-oriented approaches to substance-abuse recovery as indisputable. The authors describe religion and spirituality collectively as faith and point to faith's contribution to preventing substance use but also recovering from it. Understanding the role of spirituality and coping amongst patients should be studied in the context of treatment interventions

Gives meaning to life

Participants spoke of multiple reasons why spirituality is important in their lives, which will be discussed below.

"It gives me something to focus on." (Beth)

Alleviates Suffering

"Yeah, more or less by helping other people. You try to open their eyes to the Lord. (Billy)

Decreases Impulsivity

"Just think about things more than I like. I don't impulse stuff as much as I thought I would've before." (Timothy)

Experience of Spirituality and Religion

All of the respondents described themselves as spiritual but not one reported attending church. One participant cleaned the church but did not attend services. Others reported praying to God for help. The literature suggests that belonging to a faith-based community results in better outcomes for people in recovery. Lashley (2018) spoke of how belonging to faith-based communities is essential to recover. The author emphasized that belonging is a faith-based community offers long-time hope to the participant. In exploring interventions, this nuance between faith-based communities and religious affiliation should be recognized. Some participants spoke of working in a church but not attending services and other participants spoke of attending as a child but in a foreign language and unable to understanding anything being said.

Church attendance

"I don't go to church every Sunday. I do clean the church, I do help with the bible study (BBS), all of that. I do everything, help on the side and stuff like that. But I just don't go to church." (Angela)

Church Background

"I told her like I grew up like in a Spanish culture so growing up my, I couldn't understand what they were saying. I was born here, and my family was born in the islands. So, growing up and all I went to church and all, but I didn't understand nothing they were sayin'." (Jasmine)

Relationships with Family

As discussed above, family relationships can be positive and supportive, but also negative and destructive. Three respondents articulated 25 statements coded as family conflict, including disappointment, spirituality, and communication.

Family substance abuse and treatment

"I mean I got a little brother that still I mean he's actively still using, but that's why I'm not going to go home. I'm goin' move in with my sister just cause I don't wanna' be around this stuff anymore. And still I mean be around him is my choice." (Timothy)

Victim of domestic violence

"So, it is better off for me because he was beatin' on me and fighting on me all the time." (Angela)

Family conflict

"And she said, well, you can't make deals with God, but I said, I talked with him and me and him made this deal." (Angela)

One participant felt that family conflict was difficult for her: “on me too, yeah, because I live with …. her and him and his ex fightin’ all the time dragging the kids in the middle of it, and stuff like that.” (Angela)

“But after a while, I don’t even care. They think I’m a disappointment oh, well, write me off. I’m still going to have to live my life.” (Timothy)

Chapter 5: Discussion

This study utilized chaplain-led interviews for the purpose of determining the importance of spirituality-religiosity, and the unique spiritual needs of patients with opioid use disorder in the acute care setting. Consistent with phenomenological research, the goal of the study was to understand those needs through the lived experiences of subjects in an acute care setting. The FICA Spiritual Assessment tool was used by chaplains which allowed participants to share their personal experiences. Coding of the study resulted in seven major themes which will be used in the development of patient interventions (Appendix G, Table 1).

While all participants described a belief in a benevolent God and benefits of spirituality, several remarked on their addiction eclipsing their spiritual life and complicating their relationship with their higher power (e.g., feeling shameful for failing God or for calling on Him only in times of need). This is consistent with the literature. Dermatis and Galanter (2016) define spirituality as that which gives meaning to life. Lovett & Weisz (2020) suggested that spirituality might facilitate recovery by strengthening purpose in life.

Relationship with a higher power was also explored throughout the interviews, and all five participants expressed a belief in God. The five participants only described their higher power as a Christian God. This may be due to a result of the small sample size, the demographics of the participants, and the geographic region. Using chaplains to conduct the interviews may have influenced participant's views as Christian-oriented.

God image, as described by Hall and Fujikawa (2013) typically refers to one's personal view of God but as described by the authors, a person's God image is multidimensional. Multiple dimensions include biological, environmental, behavioral, and emotional dimensions. The authors also discussed a person's God image existing on a continuum from positive to negative. Participants in this study articulated that their higher power was a benevolent God, one that looked over them, made plans for them, and saved them. The participants described believing in a God that could protect them from their physical reality, especially their opioid use disorder (OUD). This is similar to early stages of recovery, where there is a denial of the serious reality of their addiction or health condition. Gastala (2017) describes denial as the single largest threat in addressing the opioid epidemic. The author also mentions denial by families, patients, community and physicians to add to the threat to address the epidemic.

Regarding their relationship with God, participants wanted to believe in something greater than everything else. Courtney Slater, Ph.D. (Slater, C., personal communication, January 28, 2021) discussed relationship as two people and the feeling between them, and from an attachment perspective, relationships form from infancy, where the baby is need of the other, an internal working model of self, an internal model of others, and a sense of security from relating. In this study, the participants describe their internal working model and sense of self as negative – such as a feeling of shame or a concern of letting God down.

A portion of the interviews focused on the experience of spirituality and religion. Understanding the role of spirituality and coping amongst patients. All of the participants viewed themselves as spiritual and believed in God as their higher power, but they did not belong to a church or attended services. The literature does not differentiate religion and spirituality, but religion has been defined as being more formal with organized activities rituals, and practices while spirituality is about finding meaning outside of oneself (Puffer et al., 2010). The association between spirituality and addiction is well-documented in the literature and the benefits of the relationship are described. Individuals with OUD who are spiritual are better able to manage relationships, family conflict and social aspects of life (Beraldo et al., 2019). Benefits of and experiences of spirituality were explored with participants. It was notable that none of the participants belonged to any faith-based community, yet our findings suggest spirituality is significant in each of their lives. Yaghubi et al. (2019) spoke of spiritual emptiness as one of the most significant factors for relapse in patients with OUD. The importance of belonging was discussed by Grim and Grim (2019). They concluded faith-based approaches to substance-abuse recovery as indisputable. Participation in a faith-based community versus a religious setting will be explored as a part of treatment interventions.

All five participants discussed spiritual coping. Prayer was a consistent thread throughout the interviews. Participants talked to God and prayed to him. One participant said he prays every morning and prays for the world. This ritual is illustrated in the literature as a positive use of religion to deal with stressors (Medlock et al., 2017). Prayer is defined as a spiritual activity and is required in all 12-step programs (Juhnke et al., 2009). The authors also indicated that subjects view God as a personal resource that can help in the recovery process. This use of God as a personal resource was expressed in the interviews.

During each interview the chaplain asked participants about the support they received from individuals, family, and communities. Participants spoke of support from faith-based communities, prayer support, and support from family. The literature presents the value of faith-based community participation as an important element of recovery. Many faith-based programs offer long-term hope and provide access to support through community involvement (Lashley, 2017). Positive support from family was mentioned by four participants. The benefit of this support has been shown in the literature. Atadokht et al. (2015) demonstrated that supportive structures and networks, such as family, may play a major role in recovery and relapse prevention.

Family has been seen as a positive factor in recovery, but family relationships and conflict can be negative and lead to conflict. Participants spoke of family members expressing a lack of credibility, poor judgement, and disappointment in them. These themes are also consistent in the literature, which suggests the need for family-based interventions in recovery. Nakonezny et al. (2017) discussed that family discord could result in more substance use in the posttreatment period and suggested that involving family in therapy might be a useful intervention. Negative emotions expressed by family and criticism of patients may also be a contributing factor in a patient's relapse in the posttreatment period (Atadokht et al., 2020).

The results of this study of spirituality and addiction recovery in the acute care setting yielded useful results toward the development of interventions for hospitalized patients. A second grant will be sought to study interventions, such as a coordinated hospital and community-based interventions to address the spiritual needs of individuals with OUD. An important element of the interventions will focus on trauma- informed care (TIC). As discussed above, many patients with OUD also suffer from PTSD so any intervention should be informed by TIC. Interpersonal

communication with patients focused on providing psychological safety and that are sensitive to the effects of trauma can be a powerful tool (Isobel & Delgado, 2018).

Patients experience serious medical conditions secondary to their OUD. While some undergo surgical procedures, like a valve replacement, many patients are hospitalized for 2-6 weeks to treat infections such as osteomyelitis. Based on the findings, and consistent with the literature, four potential interventions are described below.

Nurse-Led Spiritual Engagement

Nurses are considered to be members of the most trusted health care profession and are role models in the desire for the health of their patients (Linton and Koonmen, 2020). Nurses spend the most amount of time with patients compared to any other caregiver in the hospital; thus, patients often develop a trusted relationship with the nurse. This relationship can be leveraged to assist patients in the early stages of recovery.

Several studies assessed patients' desire for some type of spiritual or religious involvement along with clinical management. Rosmarin et al. (2015) conducted a study in a psychiatric hospital and determined that more than half of the participants expressed fairly or great interest in spiritual involvement while over 17% expressed "very much" interest. McCord et al. (2004) also studied interest in spiritual involvement by patients and concluded that 40% of hospitalized patients welcomed spiritual involvement, which increased to 70% in a death and dying setting.

In 2017, core competencies for nursing, and other professionals, were developed by the Association for Multidisciplinary Education and Research in Substance Use and Addiction (AMERSA) to address substance use (Finnell et al., 2019). Previously, nursing education only sporadically identified or educated students about spiritual care. Standard 5B of the standards of

professional performance for nursing describe the core competencies related to the continuum of substance use required for nurses. Standard 5B requires nursing to develop an individualized plan in partnership with the healthcare consumer, while considering the person's situation, including values, spiritual and health practices, preferences, coping, culture, and environment (Finnell et al., 2019).

Patient care in the 21st century has evolved to patient-centric strategies as suggested by the Joint Commission on practice guidelines. Williams et al. (2016) discussed spirituality as a central focus of their Whole Person Framework that guides their nursing curriculum at the Blessing-Rieman College of Nursing in Illinois. They felt that addressing spiritual practices should be a part of nursing practice and that education should be provided to all nurses to enable them to speak to patients about spirituality. Giske (2012) spoke of spirituality as an important role for nursing to offer hope, meaning and comfort. The author evaluated 10 papers to develop four themes that he deemed essential for leaning about spiritual care: (1) learning in diverse, real life situations, (2) employing pedagogical methods to understand how to integrate spiritual care, (3) managing barriers (patient and/or nurse), and (4) evaluating spiritual care learning.

The first intervention suggested by this study is to develop an educational protocol for nurses (drawing on proven and effective educational resources), that incorporates pertinent information about spirituality and addiction. Nurses understand that integration of spirituality is important for optimal healing but have reported insufficient education to understand how to address spirituality (Barss, 2020). The classroom experience could instruct nurses on how to engage patients in a discussion of spirituality and build their confidence in discussing spirituality with patients in addiction recovery. Nurses have also lacked training in treating patients with substance use disorders. Thus, the American Association of Colleges of Nursing (AACN, 2018) identified the

need to enhance nursing curriculum to address the opioid epidemic. They suggested topics in the curriculum to include management of patients undergoing detoxification, identification of substance dependence, education on drugs of addiction, as well as description of the emotional and behavioral elements of addiction.

Nurses that have a greater understanding of addiction and are competent at introducing spirituality into care can enhance the overall wellbeing of the patients. This intervention could be a gateway to working with patients to suggest the next level of intervention.

Coordinated Inpatient and Community Faith-Based Support

Lovett and Weisz' study (2020) focused on recovery and religion in homeless people and the benefits of a spiritual community. The authors summarized that people want something more than recovery; they are looking for a better life and a relationship with God. The study site will provide meeting locations for several faith-based communities, such as Narcotics Anonymous, Smart Recovery, and other 12-step programs to hold weekly meetings at the acute care inpatient facility. Patients will be invited to participate in the meetings if they choose to do so. This intervention will provide a safe and trusting environment for patients to explore participation in a support group. Additionally, members of the support groups that meet at the hospital will be encouraged to speak to patients and provide more individualized understanding of how the support group functions. In a phenomenological study of spiritual awareness through Alcoholic Anonymous (AA) participation, Vandivier (2020) described the shared experiences of members of AA. They experienced social support, their own need for help from others, a sense of belonging, and accountability.

The social workers at the hospital will help patients connect to a faith-based organization of their choosing prior to discharge and assist with a warm hand-off. Literature supports such

involvement and suggests that it leads to greater life satisfaction. Krause and Ironson (2019) have shown that people who feel more spiritual support are more likely to see God as merciful and forgiving. They suggest that forgiveness tends to repair damaged relationships, another step in the recovery process.

Family therapy sessions

Family discord is an important factor in addiction relapse. Studies by (Nakonezny, 2017), and Atadokht et al. (2015) found that social factors play an important role in the incidence, prevalence, and persistence of addictions. Social factors included family factors, particularly expressed emotion, described in terms of the relationship between the patient and family members. Thus, an important intervention should include family dynamics. It is not only the addiction itself that needs to be addressed but other elements of recovery that cause emotional distress. Martinelli et al. (2020) found that three stages of addiction included early (<1 year, sustained (1-5 years), and stable (> 5 years). The authors discussed the multiple life domains associated with recovery, such as legal and social issues, and economic well-being. Their work focused on issues of housing, crime and employment in early recovery, gradually improving with length of recovery. Participants in this study spoke of strained relationships, no place to live, worry about an addicted child, loss of jobs, and poor family communication. Rowe (2012) discussed the initiation and continued drug abuse to be the result of many interacting factors within the individual and the family. Thus, it is not only the substance user who needs healing, but also the family.

Family relationships and interactions cannot be solved in the short period of acute inpatient hospitalization, but the concept of family therapy can be introduced to patients and their families. Patients with a history of opioid use disorder should be interviewed during the acute inpatient

stay by the hospital's social worker or a physician or nurse from addiction medicine. The patient should be asked if they and their family would like to meet with a trained counselor to talk about family therapy. The goals of family therapy would be discussed with the patient and the family, and if they are interested, the hospital's social worker would establish a relationship with the appropriate organization to conduct evidence-based family therapy once the patient is discharged.

Chaplain Fellowship

Chaplains serve important roles in hospitals. They provide spiritual comfort and empathy to both patients and family members, religious referrals, pray with patients, and are present for the dying patient. Cunningham et al. (2017) discussed the importance of recognizing the role of spirituality in health care and integrating clinically trained chaplains into the care of patients. The author describes how chaplains can help make sense of the experiences that patients are facing, which is valuable for patients with OUD. Chaplains further trained in substance use disorders can address spiritual issues specific to patients with OUD.

Creating a position for a chaplain, specially trained in addiction, to be fully available for patients that are suffering from substance use disorder is recommended. This chaplain could then create a fellowship program for chaplains in residency programs to be trained for caring for patients in addiction recovery. This specialized chaplain residency program could serve as a resource to other institutions with patients experiencing OUD.

Future Direction

As discussed earlier, this study was suspended as a result of the COVID-19 pandemic and the researcher was not able to achieve saturation. Important themes emerged from the coding of completed interviews. The researcher recommends completion of additional interviews to

achieve saturation once the clinical site allows resumption of the study. Once completed, the interventions described above, in addition to any other findings, will be fully described with the intention of conducting a follow-up study to validate the interventions for use with the acute care inpatient population.

Limitations

There were several strengths in this study. This research was conducted in collaboration with a Ph.D. psychologist with advanced training in addiction, trauma, and assessment. Additionally, interviews were conducted with the manager of Pastoral Care and Clinical Pastoral Education Program Director who has over 18 years at the clinical site. The FICA Spiritual History Tool and the Brief RECOPE were utilized in the interviews and are excellent, validated tools. Some limitations existed for this study. First, Covid-19 evolved into a global pandemic early in the enrollment phase of the study. The study was suspended after only five-chaplain led interviews were completed and at the time of this writing has not resumed. As a result of the limited number of interviews, saturation did not occur. Also using chaplains to conduct the interviews may have influenced participant's views as Christian-oriented. Additional interviews may have resulted in more diversity of religious affiliations and could then result in more or different types of interventions.

The researcher suggests continuing this study once the clinical site permits resumption.

Conclusion

This study evidenced a link between spirituality and addiction recovery in the acute-care setting. Clearly, the amount of research into this phenomenon has not kept pace with the increased level of opioid abuse. More robust studies with larger patient populations are needed,

and the diversity of patients must be broadened. More significant funding is required to do this research and the argument in support of health care must be made to change the funding philosophy by state and federal organization. Spirituality/religiosity portends great support among the addicted population, and as nurses it is incumbent upon us to develop models of care with robust underlying research in support.

A number of themes emerged that will yield interventions to leverage this spirituality. The concepts of faith-based communities, nurse-led spiritual interactions, chaplain involvement and family relationships were all discussed. Interventions in the acute-care setting focused on these concepts should be further developed and validated.

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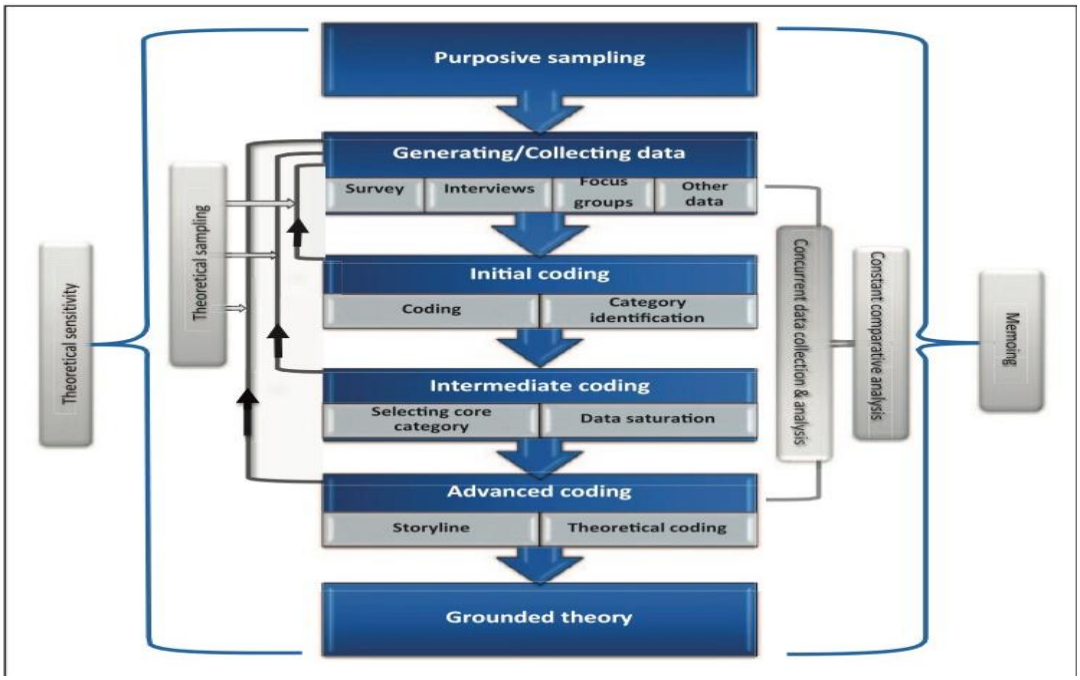
Appendix A


Purposive sampling
Generating/Collecting data
Survey
Interviews
Focus groups
Other data
Initial coding
Coding
Category identification
Intermediate coding
Selecting core category
Data saturation
Advanced coding
Storyline
Theoretical coding
Grounded theory
Theoretical sensitivity
Theoretical sampling
Concurrent data collection & analysis
Constant comparative analysis
Memoing

Appendix B

Table 1

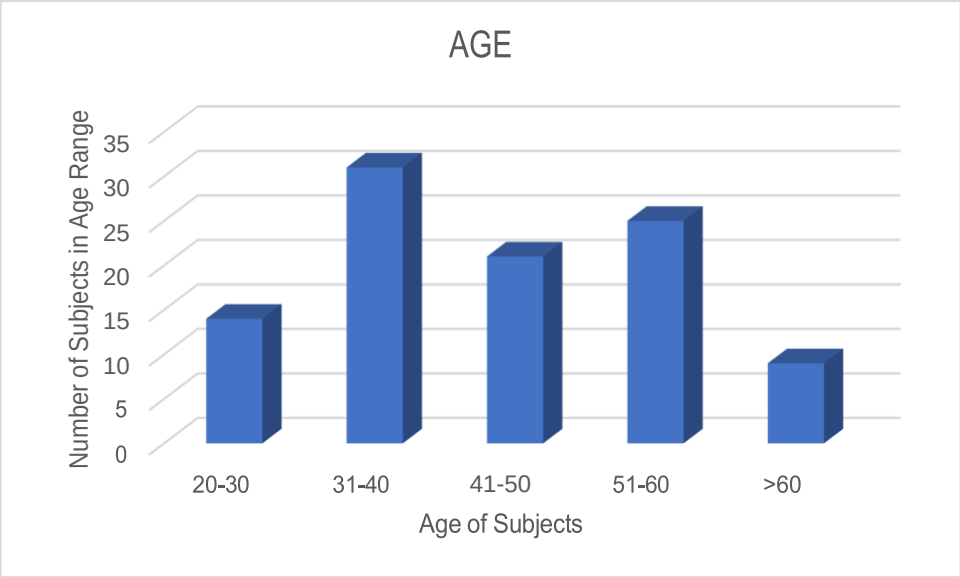
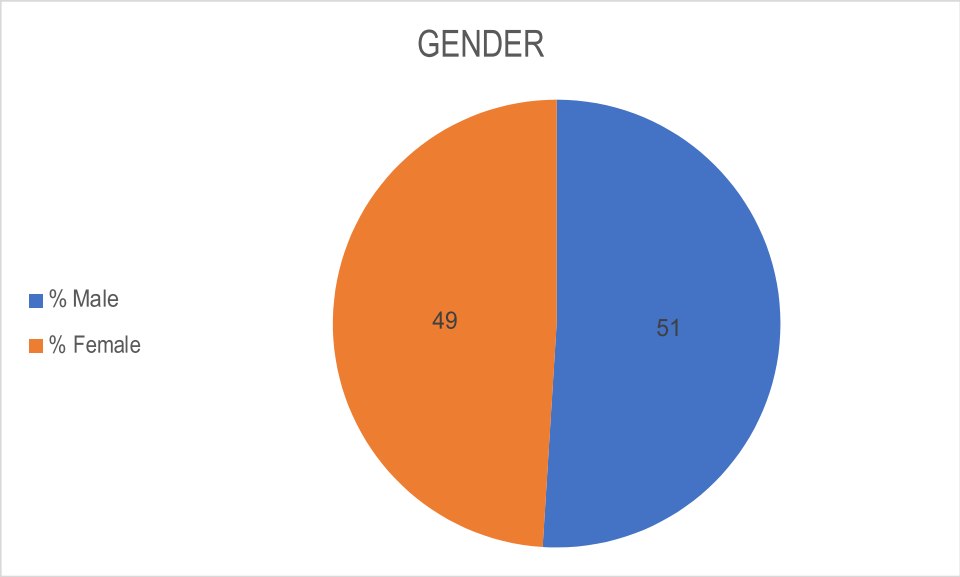


Table 2



Appendix C

Title of Study:

Principal Investigator:

Contact Phone Number:

Introduction

Consent to Participate in a Research Study (Patient Interview)

An Assessment of Spirituality in the Treatment of Opioid Use Disorder: A Mixed Methods Study

Stacey Boyer, PsyD 302-733-6132

Version 1, date 12/04/2019

You have been asked to take part in a research study. Before you decide whether to participate, you need to know the purpose, procedures, risks, and benefits so you can make an informed decision. This process is known as informed consent.

Research studies include only people who choose to participate. Please read this document carefully and ask any questions you may have before agreeing to participate.

The purpose of this study is to better understand spirituality and religion among patients with a history of intravenous opioid use. Specifically, we will interview patients to learn more about their spiritual preferences and needs. This work is being done to develop an intervention that meets the needs of patients with a history of intravenous opioid use.

What is involved in the study?

We are asking you to complete an interview about your personal views on spirituality and religion. The interview should take 30-45 minutes.

We expect to interview 15 patients. All interviews will be recorded and transcribed so that we can understand common themes. All of this information will be used only for the purpose of the research.

Are there benefits to taking part in the study?

If you agree to take part in this study, it is possible that you may not benefit. The researchers hope the information learned from this study will benefit other patients with a history of intravenous opioid use in the future.

What are the risks and possible discomforts from being in this study?

Risks may include discomfort answering questions. You may skip any question that bothers you. If you skip some of the questions, it will not affect your taking part in the study.

There may also be privacy risks. To maintain your privacy, we will ensure that all your information is kept confidential and that your name is not linked to any of your responses.

Will I get paid for being in this study?

No, you will not be paid for being in this study.

_____

_____

CHRISTIANA CARE HEALTH SYSTEM INSTITUTIONAL REVIEW BOARD CCC# 39184 APPROVAL DATE:

APPROVAL PERIOD THROUGH

12-10-2019 12-10-2019 12-09-2020

Patient Initials_____

What are my rights as a participant?

Your participation is voluntary. You may choose not to take part or leave the study at any time without penalty.

Can I stop being in the study?

You can stop being in the study at any time. If you agree to participate in the study, you still have the right to withdraw at a later time. In addition, at the time you withdraw you have the right to refuse to allow future information about you to be collected and used for the research study.

If you decide to withdraw from the study, you will be asked to tell a member of the research staff and sign a written notice (called an Acknowledgement of Withdrawal form).

What about confidentiality?

We need to record and transcribe your interview responses in order to conduct this study. The information we collect through the interview will be the minimum needed to meet the goals of this research study and will be used only for the study described in this consent. If you decide not to allow this use of your information, you may not join or continue in the study, since the researcher needs this information to meet the study goals.

We try to keep your personal information private and confidential. However, we cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law and it may be disclosed to others as described in this section. Individuals and organizations that may look at and/or copy your research records to conduct this research, assure quality of the data and analyze the data, as it pertains to this study, include:

- lz Members of the research team at Christiana Care
- lz Medical staff who are directly or indirectly involved in your care related to this research
- lz People who oversee or evaluate research and care activities at Christiana Care, including the

  ChristianaCare Institutional Review Board, a committee that reviews research projects to

  help ensure that the rights of research participants are protected

- lz People from the Office for Human Research Protections who perform independent

  accreditation and oversight of research.

  By signing this document, you are authorizing ChristianaCare to use and release your information for this research.
  It is also possible that important information will be shared with your primary caregiver or other health care professionals as needed for your safety.

  If information from this study is presented or published at scientific meetings or in journals, your name and other identifying information will not be used.

  You have the right to see any medical information about yourself. However, during the research study you will not have access to all of the information that is created or collected for the study. You do not have the right to review and/or copy records kept by the sponsor or other researchers associated with the study.

If you agree to participate in the study, you still have the right to withdraw at a later time. If you withdraw from the study, your information that has already been collected may still be used and

disclosed as described in this form for the research study but no new information about you will be collected.

Who do I call if I have questions or problems?

For questions about the study, contact Dr. Stacey Boyer at 302-733-6132.

For questions about your rights as a research participant, contact the ChristianaCare Institutional Review Board at (302) 623-4983.

You will be given a copy of this form.

Signature

You have read the information provided above. You voluntarily agree to take part in this study. You will be given a copy of this form.

_____

_____

Signature of Research Participant Date

_____

Printed Name of Research Participant

_____

_____

Signature of Person Obtaining Consent Date

_____

Printed Name of Person Obtaining Consent

CHRISTIANA CARE HEALTH SYSTEM INSTITUTIONAL REVIEW BOARD CCC# 39184 APPROVAL DATE:

APPROVAL PERIOD THROUGH

12-10-2019 12-10-2019 12-09-2020

Patient Initials_____

ChristianaCare Institutional Review Board

RESEARCH PARTICIPANT BILL OF RIGHTS

As a participant in a research study or as someone who is asked to give consent on behalf of another person for such participation, you have certain rights and responsibilities. It is important that you fully understand the nature and purpose of the research and that your consent be offered willingly and with complete understanding. To aid in your understanding, you have the following **specific** rights:

1. To be informed of the nature and purpose of the research in which you are taking part.
2. To be given an explanation of all procedures to be followed and of any drug or device to be

   used.

3. To be given a description of any risks or discomforts which can reasonably be expected to

   occur.

4. To be given an explanation of any benefits which may be expected by the subject as a result

   of this research.

5. To be informed of any appropriate alternative procedures, drugs, or devices that may be

   advantageous and of their relative risks and discomforts.

6. To be informed of any medical treatment which will be made available to the subject if

   complications should arise from this research.

7. To be given an opportunity and encouraged to ask any questions concerning the study or the

   procedures involved in this research.

8. To be made aware that consent to take part in the research may be withdrawn and that

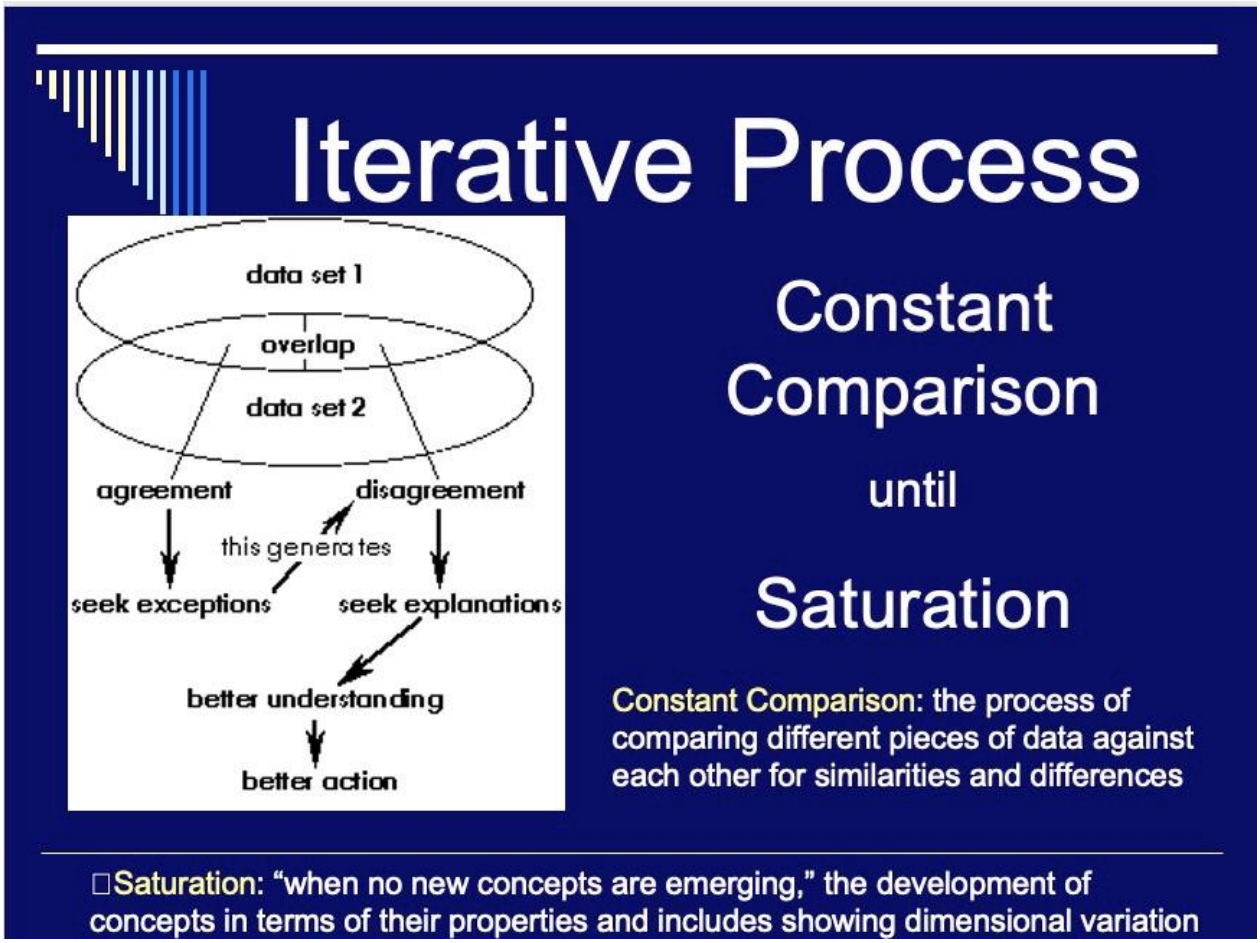
participation may be discontinued at any time without affecting continuity or quality of your

medical care.

9. To be given a copy of the signed and dated written consent form.
10. To not be subjected to any element of force, fraud, deceit, duress, coercion, or any influence in reaching your decision to consent or to not consent to take part in the research.
11. Your signature on the Informed Consent does not waive any of your legal rights.

If you have any further questions or concerns about your rights as a research participant, please contact the ChristianaCare Institutional Review Board at (302) 623-4983.

Appendix D



Nath, (2012).

Appendix E

Program Director/Principal Investigator (Last, First, Middle): Boyer, Stacey, Marie

DETAILED BUDGET FOR INITIAL BUDGET PERIOD
DIRECT COSTS ONLY

FROM 07/01/2019 THROUGH 06/30/2020

List PERSONNEL *(Applicant organization only)*
Use Cal, Acad, or Summer to Enter Months Devoted to Project
Enter Dollar Amounts Requested *(omit cents)* for Salary Requested and Fringe Benefits

NAME	ROLE ON PROJECT	Cal. Mnths	Acad. Mnths	Summer Mnths	INST.BASE SALARY	SALARY REQUESTED	FRINGE BENEFITS	TOTAL
Stacey Marie Boyer, PsyD	PD/PI	1.8			[redacted]	0	0	0
Research Nurse, TBN	RN	1.8			[redacted]	[redacted]	[redacted]	[redacted]
Kimberly Williams, MPH	Co-I	1.2			[redacted]	[redacted]	[redacted]	[redacted]
Stephen Dutton, MDiv, PhD	Co-I	1.2			[redacted]	[redacted]	[redacted]	[redacted]
Bayo Gbadebo	Data Analyst	0.96			[redacted]	[redacted]	[redacted]	[redacted]
SUBTOTALS →						37,243	11,229	48,472

CONSULTANT COSTS
$[redacted] David Rosmarin, PhD, ABPP will provide professional advice ([redacted] @ $[redacted]) to Dr Boyer remotely throughout the funding period — [redacted]

EQUIPMENT *(Itemize)*
$200 Tape recorder, Olympus Ws-801 Voice recorder, to record patient interviews — 200

SUPPLIES *(Itemize by category)*

TRAVEL
$10,388: Travel for two people to attend: IDEA NISBRE conference ($2,088), Association for Clinical Pastoral Education Annual Meeting ($3,715) and Academy of Health Annual Research Meeting ($4,584.50) — 10,388

INPATIENT CARE COSTS

OUTPATIENT CARE COSTS

ALTERATIONS AND RENOVATIONS *(Itemize by category)*

OTHER EXPENSES *(Itemize by category)*
$1800 Transcription costs includes cost to transcrip15 patient, 60 minute interviews @ $2/minute
$786 Manuscript submission costs — 2,586

CONSORTIUM/CONTRACTUAL COSTS | DIRECT COSTS

SUBTOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD *(Item 7a, Face Page)* — $ 80,000

CONSORTIUM/CONTRACTUAL COSTS | FACILITIES AND ADMINISTRATIVE COSTS

TOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD — $ 80,000

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Appendix F

Table 1

Theme	Subtheme	Sources	References
Experience of Addiction, Health & Hospitalization		**5**	**54**
	Desire for recovery	5	14
	Experience of hospitalization	4	21
	Negative impact of addiction	4	10
	Experience of MAT and medications	2	9
Relationship with Higher Power		**5**	**48**
	Benevolent God image	4	23
	Feelings about God	3	18
	Belief in God	4	7
Supports		**5**	**34**
	Family support	4	13
	Other community supports	3	9
	Lack of support	3	5
	Support from faith-based community	2	5
	Support from hospital staff	1	1
Personal Spiritual Coping		**5**	**19**
	Prayer/talking to God	4	11
	Other personal spiritual practices	3	7
	Belief in God betters life	1	1
Benefits of Spirituality		**5**	**11**
	Gives meaning to life	4	5
	Alleviates suffering	2	6
	Decreases impulsivity	1	1
Experience of Religion and Spirituality		**4**	**15**
	Church attendance	3	4
	Church background	3	8
	Faith education	1	1
Relationships with Family		**3**	**59**
	Family conflict	3	25
	Family substance use	2	15
	Relationship ended	1	3

Appendix G

Table 1