INTERVENTIONS FOR THE PREVENTION OF OPIATE USE DISORDER IN PATIENTS WITH HIGH ADVERSE CHILDHOOD EXPERIENCE SCORES IN NORTHERN NEW MEXICO: A QUALITATIVE PROJECT

by

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ABSTRACT

Adverse childhood experiences (ACEs) are known to be associated with chronic disease, various disorders, and social-emotional challenges (Anda et al., 2008). Furthermore, illicit drug use has been indicated to be associated with ACE scores, in a dose-dependent relationship (Centers for Disease Control and Prevention, 2016a). This DNP project explored the experience of patients with opiate use disorder (OUD) in northern New Mexico, who had ACE scores of four or greater. The purpose of the project was to identify, via structured interviews, interventions the participants felt may have been significant in preventing their OUD. The project sought to specifically examine interventions as they relate to ACEs. The project gave a voice to those who have the lived experience of both ACEs and OUD, to synthesize strategies to address ACEs, and conceivably build resilience. In analyzing the participant responses, the most prominent themes identified were intentional communication, understanding the home environment, creating a safe space for the pediatric patient, referring to counseling, and providing increased education regarding opiates and mental health respectively. These approaches were compared to similar interventions in the literature, to synthesize recommendations to inform the practice of primary care providers, school nurses, and counselors who interact with children with high ACE scores in the northern New Mexico region (Felitti et al., 1998).

CHAPTER ONE – INTRODUCTION

Problem Description

There exists a known, graded, dose-response relationship between adverse childhood experiences (ACEs) and illicit drug use across the lifespan (Centers for Disease Control and Prevention, 2016a; Dube et al., 2003). ACEs include emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, living in a home where a mother is treated violently, household substance abuse, household mental illness, parental separation or divorce, and having an individual in the household who is incarcerated (American Academy of Pediatrics, 2014b). Trauma and exposure to ACEs are identified a public health problem strongly implicated to place a child at risk for poor health outcomes and chronic diseases such as cancer, asthma, autoimmune disease, and depression (Hornor, 2015). Additionally, ACEs have been identified to co-occur with chronic disease in rates as high as 93% in patients from a rural primary care sample (Kalmakis, Shafer, Chandler, Aponte, & Roberts, 2018). A specific adverse outcome linked with exposure to multiple ACEs is substance use in young adulthood (Shin, McDonald, & Conley, 2018). According to the American Society of Addiction Medicine (ASAM), "In 2015, 276,000 adolescents were current nonmedical users of pain relievers, with 122,000 having an addiction to prescription pain relievers" (2016). It is recognized in the literature that there is a relationship between adverse event exposure in childhood and subsequent risk for developing a substance use disorder, yet there are limited studies to date that have examined the prevention of opiate use from the perspective of those who

have experienced opiate use disorder (OUD) (Felitti et al., 1998). Seeking to learn from the lived experience of ACEs and OUD has thus guided this scholarly project.

CHAPTER TWO – REVIEW OF LITERATURE

Background

Opiate Use Disorder

Per the Substance Abuse and Mental Health Services Administration (SAMHSA) OUD is characterized by, "…an intense desire for opioids, inability to control use, continued use despite interference with daily functions, use of increasing amounts and tolerance, spending exorbitant time to obtain and use opioids, and withdrawal" (2015, p. 1). The Centers for Disease Control and Prevention reports that since 1999, the number of prescriptions for opiate medications has nearly quadrupled. Since this market increase in prescription opiates, there has been no change in the overall pain reported by Americans (Centers for Disease Control and Prevention, 2016b). It is estimated that more than six in ten drug overdose deaths in 2015 were due to opiates (Centers for Disease Control and Prevention, 2016b). In a sample of over one hundred thousand 8th, 9th, and 11th grade students, opiate pain reliever use was the second most commonly reported nonmedical prescription drug used (1.67% of participants), and with every additional ACE there was a 47% increase in the odds of also reporting nonmedical pain medication use over a year time frame (Forster, M., Gower, Borowsky, & McMorris, 2017). Similarly, higher rates of ACEs are associated with earlier initiation of opiate use, as well as recent injection use and overdose (Stein et al., 2017). Opiate use, addiction, and overdose are a public health concern as rates of misuse, particularly in vulnerable populations, continue to climb.

Adverse Childhood Exposure

The Centers for Disease Control and Prevention Kaiser Permanente ACE study, conducted from 1995 to 1997, was a foundational study that examined the correlation between ACEs that occur prior to age eighteen and subsequent adverse health outcomes in adulthood. The neurobiological effect of ACEs may lead to adverse health outcomes. This is thought to be due to the dysregulation of the stress response via the hypothalamic-pituitary axis, leading to a cascade of pro-inflammatory cytokines, corticotrophin releasing hormones, and adrenocorticotropin-releasing hormones, ultimately resulting in the disruption in function of the neuroendocrine and immune systems (Oral et al., 2015). There are hypothesized to be real and tangible changes within the brain as a result of ACEs. Felitti et al. (1998), in the ACE study, found that for children who had reported four or more ACEs, are 4.7 more likely to use illicit drugs and 10.3 times more likely to use IV drugs (p. 245-250). The information from Felitti et al. (1998) was used to create the ACE score as a tool for clinicians to screen and monitor for the occurrence of these events, among other adverse health outcomes (Centers for Disease Control and Prevention, 2016a).

Significance

Multiple studies have identified elevated ACEs to be common and pervasive across the United States, with 21.7% of patients nationwide reporting two or more ACEs (Bethell, Davis, Gombojav, Stumbo, & Powers, 2017). When examining the importance of understanding ACEs, Felitti et al. (1998) stated, "…incomplete understanding of the

possible benefits of health risk behaviors leads them to be viewed as irrational and having solely negative consequences" (p. 254). Moreover, Shonkoff et al. (2012) asserted, "…many adult diseases are, in fact, developmental disorders that begin early in life" (p. e243). Thus, health risk behaviors may be a result of direct brain changes that occur with exposure to ACEs. This exposure may, in turn, result in chronic disease as an adult**.** Without knowledge as to how previous life experiences lead to substance use, the clinician may make the mistake of viewing OUD as random and/or due to poor decision making exclusively. Felitti et al. (1998) advocate that complete understanding of childhood trauma can help the medical community to prevent the health risk behaviors associated with these experiences (p. 253).

In response, New Mexico uniquely presents the opportunity for intervention by the pediatric primary care and school community due to the high number of children with elevated ACEs, as well as opiate misuse. Based on data from 2017, 27.8 % of children in New Mexico experienced two or more ACEs, 6 percentage points above the national average (Bethell et al., 2017). Moreover, as of 2018, New Mexico ranks last of all 50 states in measures of child well-being. This is based on evaluation across the domains of economic well-being, education, health and family, and community (The Annie E. Casey Foundation, 2018). In New Mexico, 27.5% of children have reported having been offered, sold, or given an illegal drug on school property, 5.8 percentage points above the national average. Based on survey data from 2014, 18.8% of adolescents in New Mexico reported illicit drug or alcohol use within the past 30 days. Drug-induced deaths in New Mexico have risen since 2009, most recently to 27.9%, 12.4 percentage points above the

national average. Finally, 5% of the population in New Mexico (age 12+) has reported nonmedical use of pain relievers in a year timeframe, 0.7 percentage points above the national average (Healthy People 2020, n.d.). New Mexico has a significant demonstration of increased ACE scores and drug use among the pediatric population compared to the national averages.

Project Aim

The aim of this scholarly project was to examine protective factors reported by a population of adults diagnosed with OUD and elevated ACEs. Secondly, the project sought to report demographic data and ACE score prevalence among adults diagnosed with OUD interviewed in the project. Findings seek to inform providers of preventative interventions to decrease OUD occurrence in two rural, northern New Mexico counties.

Intended Improvement

Providers who care for pediatric patients have become acutely aware of the adverse impact ACEs have on health and well-being (Felitti et al., 1998). In addition to increasing providers' knowledge of this relationship, pediatric providers, and nurse practitioners must improve skills not only to identify childhood trauma but also to improve interventions to prevent the cascade of adverse outcomes (Hornor, 2015). One expert in the field has stated of responding to ACEs, "Healthcare providers are in a position to promote *true* patient-centered care and the human body's capacity for healing" (Dube, 2017). In conducting interviews with pediatric nurse practitioners who

provide care to patients in northern New Mexico, there exists a gap in understanding what interventions are most efficacious to implement in children with high ACE scores. Further, few have examined intervention recommendations from the perspective of those who have experienced ACEs and subsequently struggled with OUD. Thus, the intended outcome of this project is to utilize the perspective and lived experience of those with high ACE scores and OUD to inform the prevention practice of pediatric nurse practitioners and providers.

CHAPTER THREE – THEORY

Neuman System's Model

The Neuman Systems Model (NSM) is nursing grand theory initially authored in 1974 by Betty Neuman. The NSM views the person as a system of inter-related parts. Further, the NSM emphasizes the concept of harmony and the protection of the person from stressors. The NSM nursing model is well suited for projects that examine how stress affects health, and factors aimed at stress reduction for the protection of well-being (Current, 2011).

Rationale for Project

Neuman and Fawcett (2012) state, "In caring for victims of crime and violence, the NSM provides a complete assessment of the client condition" (p. 375). The NSM has been chosen as a guiding theoretical framework for this project, as the concepts proposed by Neuman directly align with the philosophy that opiate use tendencies are in part based on the client's context and environment (Masters, 2015, p. 131). The project hypothesized that OUD occurs when stressors invade the client's normal state of functioning, past the point of coping (or flexible line of defense), thereby altering the client's sense of stability (or normal line of defense) (Masters, 2015). In addition, Neuman's theory aligns with the belief that the healthcare system can aid the patient in maintaining stability (or normal line of defense) by enhancing resilience through prevention strategies in childhood (Masters, 2015).

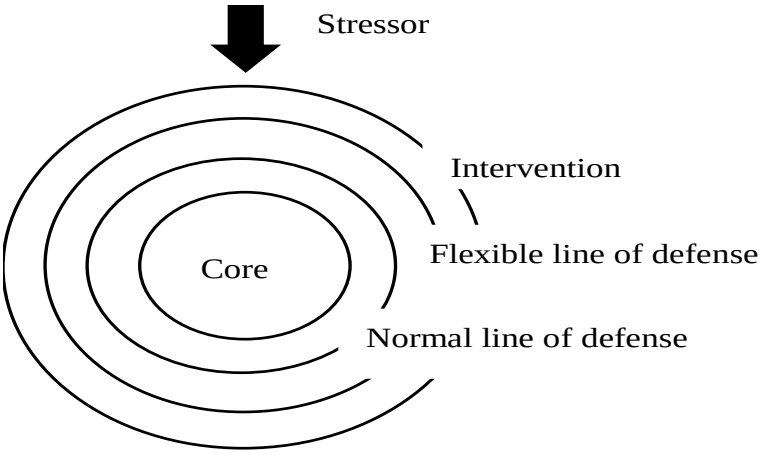

Figure 1. Neuman's System Model key concepts and project integration.

CHAPTER FOUR – METHODS

Methods

Ethical Issues

This project encountered several ethical issues when studying and synthesizing practice recommendations. The first ethical issue was the emotional nature of interview questions associated with ACEs. Care to prevent emotional trauma was taken by encouraging participants to share only to their level of comfort. A further ethical issue was ensuring recruitment was free of coercion. Because the project interviewed patients from two established health care clinics, it was important that participants understood that their participation was voluntary and would not affect their future care. Therefore, participants were recruited on a voluntary basis. Another ethical consideration included protection of patient confidentiality. This was achieved by utilizing patient identification numbers to document data. All patient data was tracked by assigning a number to the participant. In this way, HIPPA compliance was maintained. The project obtained International Review Board (IRB) approval from the Montana State University IRB on February 7, 2018. The study format was updated and, due to these changes, an addendum to the IRB application was approved on July 9, 2018. Approval from clinic administration at the clinics used in this project was obtained prior to commencing data collection.

Sample and Setting

The sample consisted of eighteen (n = 18) voluntary participants from two different health care centers in northern New Mexico. The two different clinic locations were in Taos County, New Mexico and Rio Arriba County, New Mexico. The sample was recruited from patients participating in a medication-assisted treatment program, as this necessitated that participants had experience with OUD. The medication-assisted treatment program specifically treats patients using the Alchemy Integrated Medicine model, a model utilized by northern New Mexico provider Dr. Gina Perez-Baron (Egli, 2018). The health center locations were chosen as both rural counties have been identified to have high rates of opiate use (New Mexico Department of Health, 2017).

Process and Evaluation

Participants for the study were recruited using coercion-free recruitment methods. These methods included a letter that was distributed to all patients in a medication-assisted treatment program at one of two clinics, during their regularly scheduled treatment group meetings. The DNP student attended a single session of the regularly scheduled treatment group meetings at these two separate clinic sites, each of which with a separate and unique patient population. This letter invited patients to participate in the project, and patients were given time to consider their participation. In addition, the facilitator of the medication-assisted treatment program explained the project to the group participants prior to introducing the DNP student, and the DNP student explained the project and answered questions prior to any data collection. It was important that all participants were recruited on an at-will basis, with the understanding that participation in

the study would not have any impact on subsequent care. The study did not access any patient health records. At the first site, consent was obtained by the DNP student on the same day. The staff at the second site assisted the DNP student in obtaining consent one week prior to the interview date. The DNP student then obtained consent again on the day of the interview. The DNP student and facilitator of each OUD treatment group explained that a small amount of compensation would be offered ($5 gift card) as well as light refreshments. The consent form and the DNP student verified with the participant permission to utilize an audio recording application to record participant responses. In circumstances where audio recording was declined (one participant in total sample of 18), the DNP student was permitted by the participant to record responses by hand.

ACE scores and study demographic data were collected using a form created by the DNP student (Appendix A), utilizing a 10-item ACE survey (ACESTooHigh.com, n.d.). The ACE survey was developed by the original ACE study and asks participants about experiences that occurred prior to age eighteen that have been demonstrated in the literature to be associated with adverse health outcomes in adulthood (Felitti et al., 1998). This form was distributed to all interested participants and completed by hand by the participant prior to conducting the interviews. The ACE survey has demonstrated reliability in the literature, with a test, retest reliability of .64 (Dube et al., 2004). Data in response to the interview questions were collected from the participants during a single, separate one-on-one interview. The first set of interviews occurred on August 1, 2018 at a clinic in Taos County. The second set of interviews took place on September 18, 2018 at

a clinic in Rio Arriba County. Each participant was a patient at one of these clinics respectively.

Qualitative data was collected using the elicitation technique of structured interviews (Bernard & Ryan, 2018). The interviews were led by the DNP student and guided by a specific set of questions (Appendix B). These questions were guided by the project aim and created by the DNP student. The questions were verified and revised by the faculty mentors assisting the DNP student with the project. As stated previously, the DNP student and OUD treatment group facilitator introduced the project to each of the groups prior to the interview sessions. Participants were excused from their group meeting to participate in the interview. Some participants chose to remain after their allotted group time to participate in the interview. The DNP student was given a separate room with a closed door to conduct the interviews. The DNP student recorded audio data using an audio recording application for an android phone. When audio recording was declined by the participant, the DNP student recorded responses by hand. The interview question that the DNP student was most often asked to clarify was question two, “How would you tell a pediatrician, or pediatric nurse practitioner to best respond to a child who has scored 4+ adverse childhood experiences?” Strategies utilized by the DNP student to clarify the question included 1) allowing the participant to read the question for themselves off the DNP student’s paper, 2) explaining that adverse childhood experiences are discussed on the form the participant completed prior to the interview, and 3) clarifying what a score of four or more may mean in relation to the ACE survey. The length of interview times ranged from one minute and thirty-three seconds to ten minutes

and fifty-one seconds due to the varied length of responses from the participants in answering each interview question. For example, some participants chose to elaborate on their specific responses while others did not.

Analysis

Demographic data collected by the DNP student was entered in an Excel spreadsheet (Appendix C), with each participant remaining anonymous by having an assigned identification number. Answers to each demographic data question were assigned numeric codes. Diagnoses were self-reported by the participant and then matched with the most appropriate corresponding ICD.10 diagnosis code. With the assistance of a faculty mentor, the data were statistically analyzed for means and averages.

In addition, qualitative data collected by audio recording was transcribed to text. Audio files were kept on the DNP student's locked phone until the files were transferred to a locked computer for transcription. Transcription was completed by the DNP student with the assistance of an automatic transcription website (temi.com). The website utilized destroys all deleted recordings to ensure confidentiality. The website was not used in circumstances where identifying information was recorded. Human transcription technicians are not used by the website to produce the data; as such, the DNP student was the only one to listen to the audio files. Recordings were deleted from the transcription website as soon as transcription was complete. The DNP student verified all auto transcribed data against the original audio file.

Further, transcribed data was analyzed using a purpose-driven, systematic method (Hunter, 2016). The qualitative data analysis was guided by four interview questions. First, the responses to each of the questions were analyzed for themes. The "Classic Analysis Strategy" (Figure 2) was utilized to uncover themes from the text.

Classic Analysis Strategy (Hunter, 2016)
1. Did the participant answer the question that was asked? Yes/No
2. Does the comment answer another question that was asked? Yes/No
3. Does the comment say something of importance about the topic? Yes/No
4. Is it like something that has been said earlier? Yes/No

Figure 2. Classic analysis strategy for qualitative analysis.

This strategy involved constant comparison of each response to uncover repetitive, pertinent, and significant content (Hunter, 2016). After the DNP student had identified several themes relevant to each interview question, the responses were coded for frequency. The frequency of each code was documented in an Excel spreadsheet for further analysis. Finally, the DNP student utilized the established themes and codes to determine subthemes. The themes and subthemes derived from the analysis were documented in a visual schematic. The DNP student's analytic approach was verified by a faculty mentor (Hunter, 2016).

CHAPTER FIVE – OUTCOMES

Procedural Changes

After receiving IRB approval in February 2018, the DNP student was approved by clinic administration and the overseeing provider of the OUD treatment program, to begin to collect data at a federally qualified health center located in Taos County, New Mexico. The DNP student used the IRB approved consent form and study design to collect data at this initial site on April 9, 2018. Due to the DNP student's work schedule, plans were made to continue data collection in June. At that time, the non-profit corporation that oversees the local clinic retroactively denied the project until a legal review of the project was completed. The DNP student held off data collection and awaited legal review by the parent corporation. In July 2018, the review had not progressed, and due to time constraints on the DNP student to complete the project, the decision was made to seek other locations for the project.

As a next step, the DNP student complied packets explaining the project and distributed them to new providers in Taos and Rio Arriba County. Through this method, the DNP student was connected to a provider in the community who specializes in OUD treatment. The new provider requested revisions to the project design after reviewing the project. The changes to the project from the original IRB application included 1) the DNP student would not access electronic health records, 2) names would not be recorded and only used for the purpose of organizing the interview, 3) the interviews would occur one-on-one, 4) the DNP student would no longer use a single interview site but several clinics

in northern New Mexico, and 5) a small amount of compensation ($5 gift cards) would be offered to participants. The gift cards and refreshments were purchased by the DNP student, and no outside funding was used. The consent form was edited and re-submitted to reflect these changes, along with the IRB addendum.

In consideration of the design change, a decision was made to not include the data collected from the first clinic site. As such, an unintended harm to these participants is that their valuable insights and observations about their OUD and ACEs were not included in this project. This is certainly a regret of the project, as much was learned in these first interviews. The data and consent forms for these participants will be kept by the DNP student, in a secure location, for three years, as is directed by the IRB approval letter.

Conversely, there were several benefits to selecting new locations for the project, as well as revising the project design. One such benefit was that the second project design went further to protect the health information and confidentiality of the participants by limiting the DNP student's access to the electronic health records. An unexpected result of the design change included time and consideration of the risks and benefits of offering compensation to the participants. Compensation for participants is a debated ethical conundrum. The DNP student considered the possibility of compensation blinding the participants to the emotional risks associated with participation, as well as coercion (Olson, 2012). However, in discussing the concept of compensation further with the provider who supported this project, the DNP student arrived at a different conclusion. The provider from the community encouraged the DNP student to contemplate privilege

and the agent role (Nieto, 2010). To come to a vulnerable population and ask for and take vulnerable information is a position that perpetuates privilege and the dominant, oppressive culture. Therefore, it was important for the DNP student that the project recognize that in asking participants to share vulnerable information, this project was doing a certain amount of taking. This is how the decision was made to offer compensation to express gratitude for the gift of participation.

Demographics

Statistical analysis of demographic information was conducted using SPSS software. Descriptive statistics were used to assess demographic information. Means, standard deviations, and frequencies were used to report the data. Due to the project inclusion criteria of scoring four or higher on the ACE survey, data from those with an ACE score below four were excluded for a population of $n = 18$.

Demographic analysis of the data uncovered several trends. The population interviewed was largely middle-age, with a mean age of 34.3. In addition, the population was primarily Hispanic (72.2%) and male (61.1%) (Table 1).

Age Range	Mean	Standard Deviation
19-45	34.3	7.9
Sex	**Frequency**	**Percent**
Male	11	61.1%
Female	7	38.9%
Ethnicity	**Frequency**	**Percent**
Hispanic	13	72.2%
Caucasian	2	11.1%
Native American	2	11.1%
African American	0	0%
Other	2	11.1%

Table 1. Demographic data (*n* =18), means and frequencies.

This representation is in line with trends in current opiate use in New Mexico, where Hispanic males demonstrate the highest rates of opioid overdose (New Mexico Department of Health, 2017).

Additionally, ACE score data were analyzed. Participant ACE scores equal to or greater than four were included for analysis (Table 2).

ACE Score	Range	Minimum	Maximum	Mean	Standard Deviation
	6	4	10	6.67	1.879

Table 2. ACE score data (*n* = 18).

There were twelve interviews that were excluded from analysis in this project due to the participants scoring three or less on the ACE survey. This data was kept by the DNP student for future analysis.

Finally, self-reported comorbid diagnoses were analyzed. Participants were asked to self-report any comorbid diagnoses with their OUD, to the extent that they felt

comfortable. Ten participants out of the total sample (*n* = 18) shared diagnosis information. Since the diagnoses were self-reported, they were not ranked (e.g. primary diagnosis, secondary diagnosis, etc.). Diagnostic data were coded and based on four categories: 1) mental health diagnoses, 2) mental health and physical diagnoses (mixed), 3) pain diagnoses, and 4) other physical diagnoses (Table 3).

Secondary Diagnoses	**Frequency**	**Percent**
Mental Health Diagnosis	6	60%
Mental Health and Physical Diagnosis (Mixed)	3	30%
Physical Pain Diagnosis	1	10%
Other Physical Diagnosis	0	0%

Table 3. Secondary diagnosis data (*n* = 10), frequencies and percent.

The most commonly reported comorbid diagnoses were mental health diagnoses, specifically post-traumatic stress disorder. This is in line with other study findings where post-traumatic stress disorder was associated with higher (mean ACE score of 11/19 on a 19-item survey) ACE scores (Kalmakis et al., 2018). Additionally, ACE scores have been found to be related to increased rates of anxiety and mood disorders generally, which in turn may lead to increased reporting of painful conditions (Sachs-Ericsson, Sheffler, Stanley, Piazza, & Preacher, 2017).

Qualitative Findings

Qualitative data exemplars were chosen for coding and further presentation based on repetition of content. The primary themes were utilized for the first level of coding, but no further coding was performed. Primary themes were additionally analyzed for subthemes and comparisons were made between themes and subthemes.

The first set of themes was extrapolated from the information participants provided to answer question one from the set of interview questions. Question one states, "What is something a pediatrician, school nurse, or counselor could have done to better help you cope with trauma in childhood?" The themes deduced from the participant responses were 1) intentional communication, 2) culturally sensitive and relevant approaches, 3) connect to healthcare and/or counseling services, and 4) nothing (Figure 3).

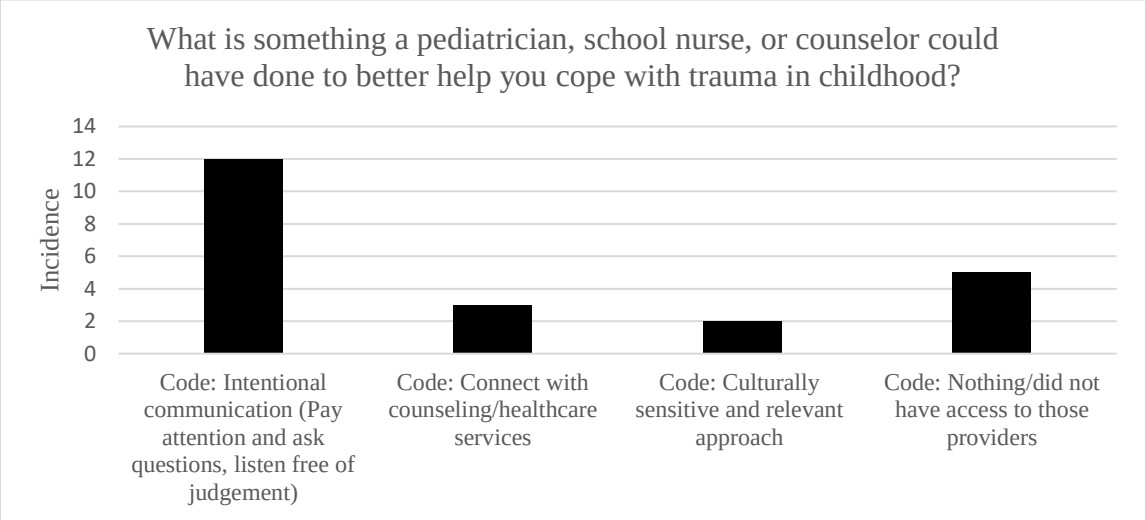

Figure 3. Coded themes in response to interview question one.

Further, the most commonly referenced theme, intentional communication, was subdivided into two subthemes: 1) listen free of judgment and 2) ask questions/pay attention. Of intentional communication, one participant specifically reported, “Honestly I think that they didn't really listen…. I was like, ‘I thought I was supposed to be able to come to you for help,’ and then got shut down so then that kind of paved the way for me going, ‘Oh I need help, oh no I always get shut down, so I always shut down.’” Another participant reported, “They could have paid more attention to what was happening.” These sentiments demonstrate the need for key adults in the child’s life (pediatricians, pediatric nurse practitioners, counselors, nurses, and school staff) to communicate effectively with children who have experienced, or are suspected to have experienced trauma, from a place of compassion and genuine inquiry.

Similarly, several participants indicated that health services would have been beneficial, one participant stated, “[If] their child is having a hard time at a young age that they should maybe take them to see the psychiatrist or a pediatrician…at an earlier age.” In terms of culturally sensitive and relevant approaches, a participant described that “Peer support from an elder of my color, traditional, ceremonial type” would have been impactful in childhood. Finally, an unanticipated response was the sentiment that there was not any intervention that would have been particularly therapeutic. More so, some respondents reported not having access to the figures mentioned in the question (e.g., school nurses, pediatricians, counselors). For example, one participant responded, “Been there actually. I didn't have a pediatrician.” And another, “I don't think my school even had a counselor.” These responses highlight the bias present in the DNP student’s

original line of inquiry and demonstrate the need for additional investigation as to how to support vulnerable children who do not have access to the above-mentioned adult figures. Further, additional investigation of other adult figures in the child's life such as a teacher, coach, parent, grandparent, aunt, uncle, or other significant mentor is needed to evaluate how these roles may be protective.

Similarly, four primary themes were extracted from the analysis of the second interview question. The second interview question asked, "How would you tell a pediatrician, or pediatric nurse practitioner to best respond to a child who has scored 4+ adverse childhood experiences?" Of note, this question posed the most significant number of requests for clarification by the participants. This may be attributed to differences in participant knowledge of ACEs as a concept. Some participants expressed familiarity with ACEs from their treatment program(s), while other participants requested clarification. Frequently, the DNP student found it necessary to rephrase the question and was often asked to explain terms within the question. Specifically, the DNP student in some circumstances felt it necessary to explain a higher risk score has been demonstrated in the literature to indicate a higher risk for certain co-morbidities; as many participants expressed, they were not aware of this association (Felitti et al., 1998). The four themes present in the participant responses to question two were 1) support (the child), 2) provide a safe space where the child feels comfortable to open up, 3) get to know the family environment, and 4) refer to child protective services (Figure 4).

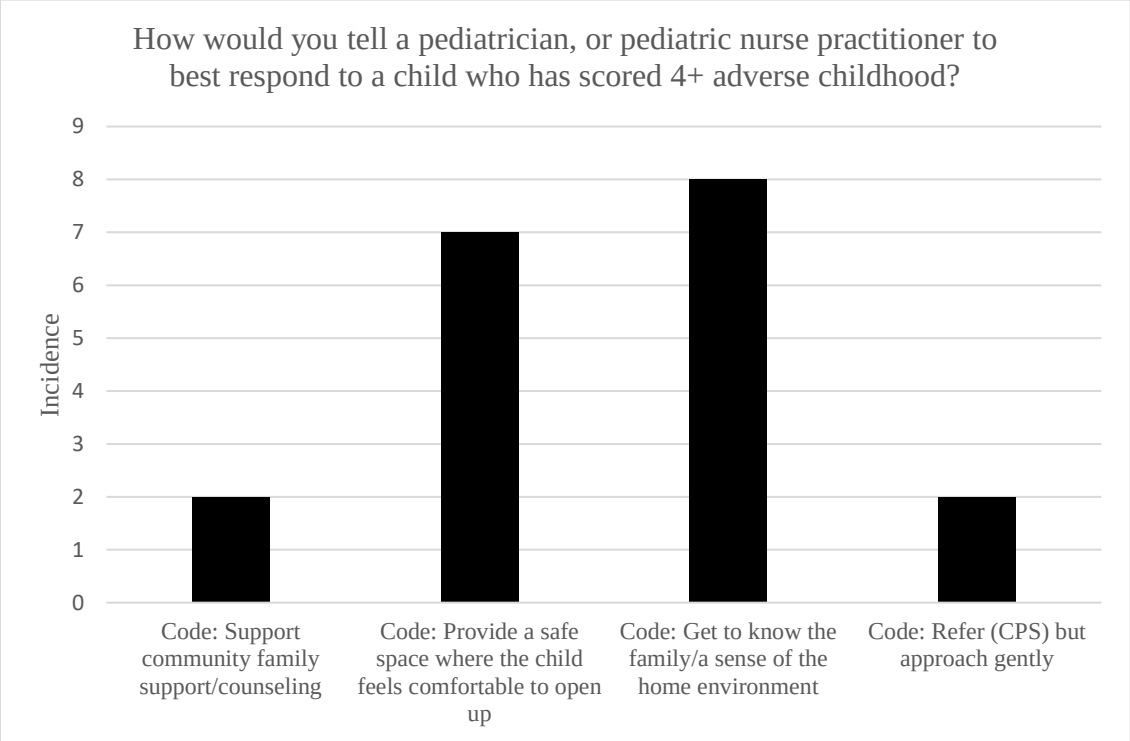

Figure 4. Coded themes in response to interview question two.

Stemming from the concept of support, two subthemes became apparent: 1) support from family and community and 2) support from counseling services. Addressing this theme, one participant stated, “More support from the local gente [people], la familia [family], good community.” Another participant identified, “…get them (the child) counseling, get them help.” Speaking to the second theme of a safe space, one participant indicated, “Make sure you give them your all. It takes a lot to up and ask for help and tell someone your problems. When I get to that point, I want someone to pay attention. If they (the adult) give a slight indication of not being interested, they (the child) are going to get uncomfortable and shut down.” Another participant recognized, “Usually kids don't talk about stuff like that unless they feel safe about it.” The most prevalent theme was getting to know/understand the family environment with the sentiment most often

expressed as, “Get to know what's going on at home.” Finally, several participants identified, when appropriate, the need to refer to and involve child protective services for the protection of the child. However, one such participant stated, “Uh it's hard to put people under investigation when they're really trying to help their kids.... it could be a lot of different things, but let's look at it from multiple sides.” It was noteworthy that each time this idea was broached, participants consistently commented that this referral should be done gently, and free of judgment.

In contrast to the above open-ended questions, there was the potential to interpret question three as a closed-ended question as described by Bernard and Ryan (2010). From question three, three themes were uncovered in analysis. These themes were 1) yes and no, 2) yes/absolutely, and 3) no (Figure 5).

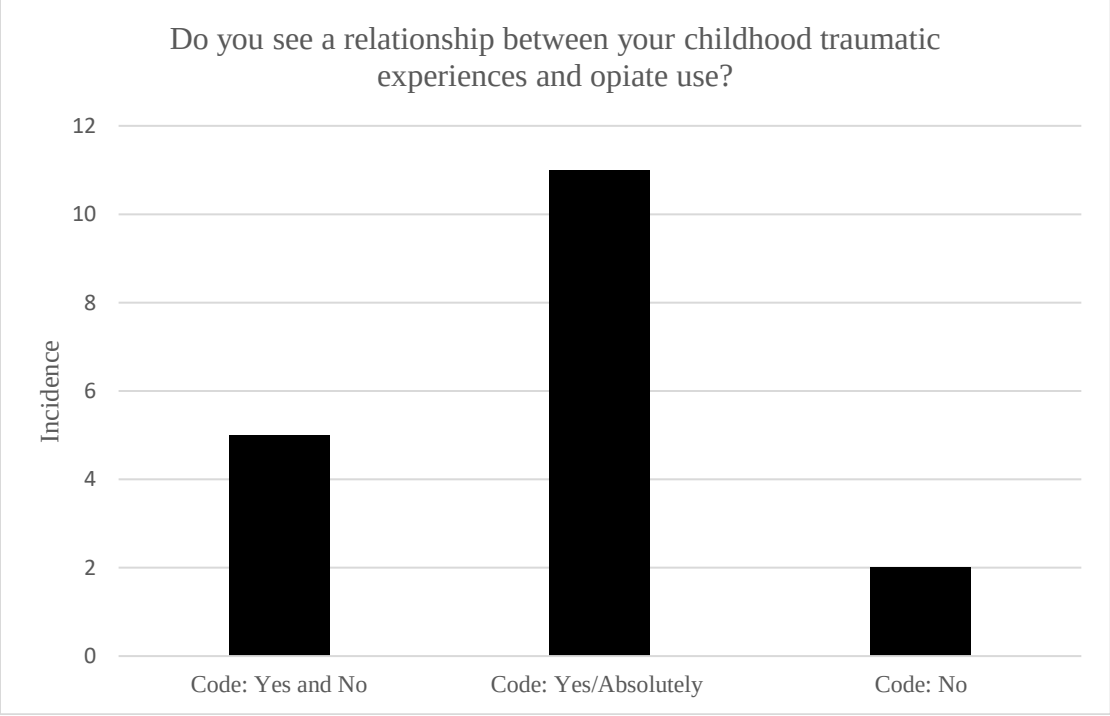

Figure 5. Coded themes in response to interview question three.

In responding to this question, some participants felt compelled to elaborate on their personal experience of this relationship. For example, “Absolutely. It was uh, a way to…deal with anything that came my way. Normally, I would break down and cry, or I would get emotional and wonder why, but any kind of substance abuse whether it be opiate 'er whatever it was that I was using at the time just took away everything and made me feel like I belonged, made me feel, I don't know made me feel a lot different in ways that I enjoyed and that's why I continued.” Moreover, the comment was made by participants on the way in which opiates not only medicated physical pain, but emotional pain as well. One participant stated, “Absolutely. Without a doubt... I didn't talk to anybody about anything that happened and as you get older you try to cover up that pain and that frustration and sure enough, I got injured and they gave me that little happy pill and said it will take your pain away and it took ALL my pain away. ALL.” With what could be interpreted as a binary question, a fair number of participants responded in a mixed manner. For example, “I do, I do. Well I don't know, I mean no because I've always had, I didn't start using opiates until I was in my thirties. But I mean I, I was using alcohol too much or weed. So, I was, I was kind of um, uh self-medicating.” Finally, there were several participants who indicated they did not see a relationship between their ACEs and OUD, “No, I didn't see it coming.” It was important to collect and consider this perspective, as it is divergent with the underlying assumptions and hypotheses present in this project.

Finally, four themes were found to address the fourth and final interview question. These themes were 1) different treatment, 2) supportive figure(s) to talk to, 3) more education, and 4) more things to do (Figure 6).

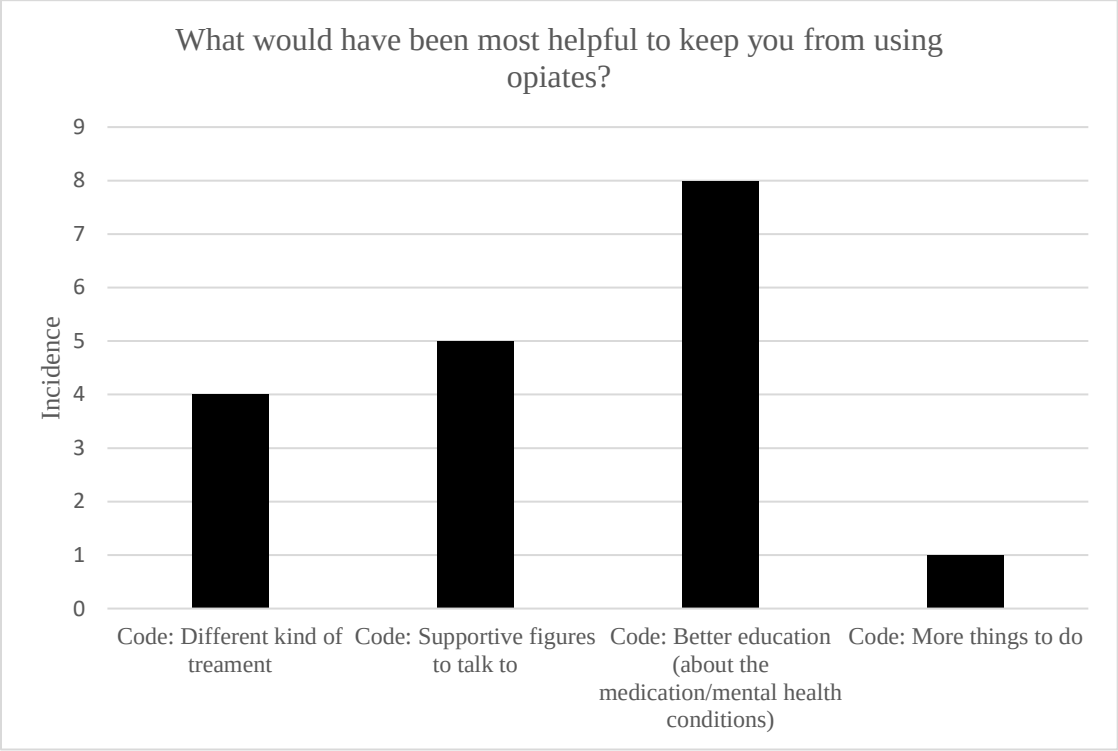

Figure 6. Coded themes in response to interview question four.

Some proposed forms of different treatment one participant referenced included, “Exercise, uh therapy, um aquatic therapy, um music therapy.” In addition to discussing different forms of treatment, there was the idea that the drug itself was the impetus of the problem. For example, “If I was never started on the pills, I wouldn't have got addicted on 'em.” Tying back to previous responses, several participants cited the importance of a supportive figure to talk to as being important. A participant reported, “I'd say just someone to you know talk to you believe in you, you know.” The most prevalent theme

and coded answer for this question was the need for better education. This theme was further divided into two subthemes: 1) education about the drug itself and 2) education about mental health. About education on the drug itself it was stated, “I was so clueless as to what opiates were about.” Tying back to previous sentiments about self-medication a participant responded, “…knowing the diagnosis that I had beforehand. That way we could have gotten that in check without having to self-medicate.” About the final theme, it was stated it would be helpful to have had, “More things to do” in reference to extracurricular activities and activities to engage youth in general. This theme was an outlier that did not fit into the other identified themes and codes.

In summary of the themes, subthemes, and the interplay between content across questions, the DNP student created a visual representation of the qualitative results (Appendix D). Through this visual representation, it became salient to the DNP student that the themes, when placed in the format of a recommendation to a health care provider, came at different points in an encounter with the healthcare system. Therefore, these themes are supportive of one another in how they direct the healthcare provider to approach a vulnerable pediatric patient. Using this approach, the DNP student was able to consolidate the themes into a decision tree schematic to support the pediatric healthcare provider in caring for pediatric patients (Figure 7).

This framework allowed the DNP student to satisfy the project aim of synthesizing recommendations for healthcare providers working with children who experience high levels of ACEs to prevent OUD in northern New Mexico.

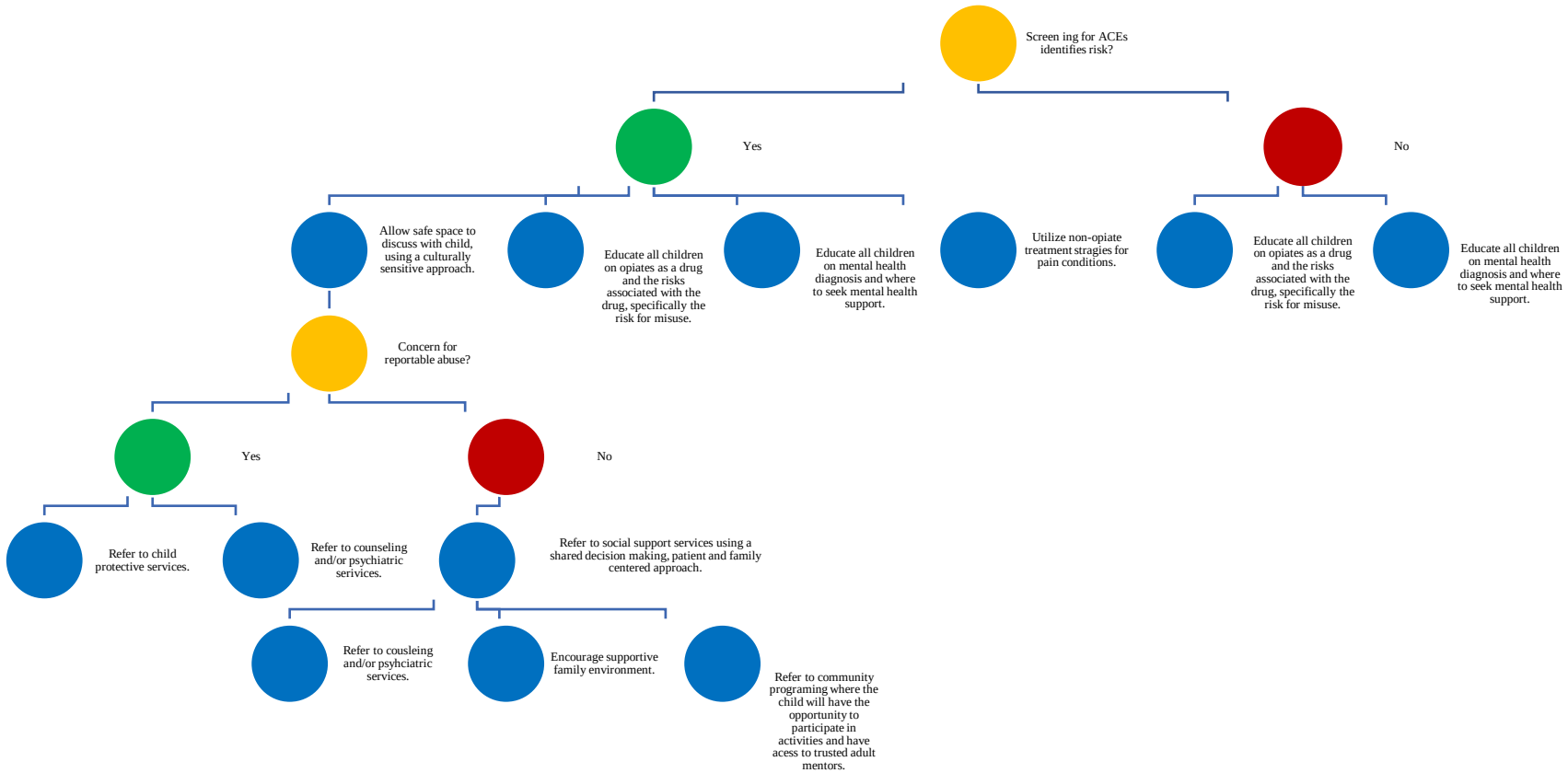

Figure 7. Proposed framework for pediatric providers to address ACEs to prevent OUD.

CHAPTER SIX – DISCUSSION

Discussion

Due to the complex nature of ACEs and OUD, and the interplay of individual resources, family resources, community support systems, socio-economic barriers, and social determinants of health, addressing ACEs and OUD is an equally complex task (Oral et al., 2015). It is generally believed in the pediatric community that resilience and building resilience may be protective particularly for persons who experience high ACEs (ACESTooHigh.com, n.d.). Moreover, specific resilience portfolio domains (emotion regulation, meaning making, community support, social support, and practicing forgiveness) have been demonstrated to be associated with positive outcomes in the face of exposure to adversity (Banyard, Hamby, & Grych, 2017). While most in the field of pediatric agree that resilience constitutes one's ability to maintain emotional or physical well-being, identifying how to build resilience can be challenging (Rosenberg et al., 2014). The benefit of this qualitative project is that it sought to give a voice to those who have the lived experience of both ACEs and OUD and to synthesize strategies to address ACEs and conceivably build resilience. In analyzing these responses, the most prominent recommendations or themes were intentional communication, understanding the home environment, creating a safe space for the pediatric patient, referring to counseling, and providing more education about both opiates as a drug and mental health.

Recommendation One: Intentional Communication,
Understanding the Home Environment, and Creating a Safe Space

In reviewing the emerging literature surrounding how to best respond to a child who has experienced ACEs, the DNP student encountered the strategy of Trauma Informed Care (TIC). Per SAMHSA (2015),

> "A program, organization, or system that is trauma-informed ***realizes*** the widespread impact of trauma and understands potential paths for recovery; ***recognizes*** the signs and symptoms of trauma in clients, families, staff and other involved with the system; and ***responds*** by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization."

Further, per the article by Oral et al. (2015), there are six core concepts that guide TIC. These concepts are:

> "1) Safety. Promoting a sense of safety involves a conscious effort to ensure that all members and clients of an organization are physically and emotionally safe. 2) Trustworthiness and transparency. Organizations must approach decisions with transparency and engender trust of staff and their clientele. 3) Peer support. Peers, which include family of traumatized children as well as individuals who have lived with histories of trauma, can be critical resources for support. 4) Collaboration and mutuality. All members of an organization can equally contribute to the healing of children impacted by adverse experiences. 5) Empowerment, voice, and choice. Developing plans of action for clients require patient centered approaches that empower clients. 6) Cultural, historical and gender issues. Efforts must be culturally sensitive and free of prejudices based on bias and stereotypes" (Oral et al., 2015, p. 231).

A policy brief by the Campaign for Trauma-Informed Policy and Practice (CTIPP) positions that TIC must be part of the comprehensive framework used for addressing the opiate epidemic (CTIPP, 2017). Specific to children, proponents of TIC advocate for the incorporation of parent-child interaction therapy and its continued study (CTIPP, 2017; Larkin, Felitti, & Anda, 2014; Oral et al., 2015). Other evaluations in the

literature of ACEs, substance use, and OUD specifically support the use of TIC (Chandler, Kalmakis, & Murtha, 2018; Dube, 2018; Larkin et al. 2014).

To date, one framework for implementing a TIC-informed, motivational interviewing-based strategy to address children who have experienced adversity in the school setting (via school nursing) has been proposed but has not been evaluated for the efficacy (Immerfall & Ramirez, 2018). Though not directly related to TIC, positive student-teacher relationships may act as a significant buffer for preventing adolescents who have experienced ACEs from engaging in nonmedical prescription drug use (Forster et al., 2017). There are several parallels (intentional communication, creating a safe space, understating the home environment) between the project's proposed framework and TIC. Therefore, further analysis may be useful to evaluate the proposed framework in coordination with the principles of TIC.

Recommendation Two: Referral to Counseling

A second recommendation generated from the project was a referral to counseling as an OUD prevention strategy for children with high ACE scores. A systematic review of the literature related to best practices for the prevention of post-traumatic stress disorder found that a brief cognitive behavioral therapy intervention may have the benefit of reducing symptom severity in those with acute stress disorder (Forneris et al., 2013). A second meta-analysis found the following interventions to all be successful in addressing post-traumatic stress disorder: 1) exposure therapy cognitive therapy, 2) cognitive processing therapy, 3) cognitive behavioral therapy eye movement desensitization and reprocessing, and 4) narrative exposure therapy (Cusack et al., 2016). A pilot trial of

mindfulness-based cognitive therapy treatment for adolescents with a comorbid diagnosis of post-traumatic stress disorder and substance use demonstrated a statistically significant reduction in post-traumatic stress disorder but did not have a significant impact on opiate use (Fortuna, Porche, & Padilla, 2017). Again, specific to adolescents, an examination of interventions to reduce adolescent substance use reported that longer duration combination programs of motivational enhancement therapy and cognitive behavioral therapy may be effective when implemented in the school setting. Further, individual cognitive behavioral therapy (with or without motivational enhancement), multidimensional family therapy, and functional family therapy are generally effective as well for reducing substance use (Caywood, Riggs, & Novins, 2015). The DNP student was unable to find literature that specifically examined the efficacy of cognitive behavioral therapy, or other psychotherapy approaches, for the prevention of OUD in children with high ACE scores. However, the literature is otherwise clearly in support of the effectiveness for counseling as a component to the overall treatment for patients with substance use disorders.

Recommendation Three:
Education about Opiates and Mental Health

Finally, the project participants identified a need for educational programs that discuss the risks of opiates and mental health generally. Via the SAMHSA website, two education programs appropriate for adults, children, and youth were discovered to specifically address opiates. One program is specific to overdose, the *Opiate Overdose Prevention Toolkit*. The other program, which may be more directly applicable to the

goal of general education about opiates, is the *Rx Awareness Campaign* (SAMHSA, n.d.). A third project that aims to prevent opiate misuse in youth is the *Operation Prevention* program. This program provides multi-media and interactive opportunities for adults and youth to learn about opiates and the opiate epidemic. The program has yet to be evaluated for efficacy (Discovery Education, 2017). To address education of youth about mental health diagnoses, SAMHSA offers the *Family Psychoeducation Evidence-Based Practices (EBP) KIT*. This kit provides policymakers, public health workers, schools, etc. with a framework for developing programs to promote awareness around mental health in their respective communities (SAMHSA, n.d.). These programs and similar programs, in the evaluation their efficacy, may display promise for educating not only children who have experienced ACEs but youth at-large around opiate use and mental health.

Opposing Views

The project did encounter findings that were contrary to what was hypothesized and what has been demonstrated in the literature. There were two participants of the total sample (n = 18) who did not feel that there was a relationship between their experience of ACEs and OUD. Though this is contrary to what has been found in examining samples of participants with ACEs and OUD, it is important to acknowledge this sentiment (Austin et al., 2018; Chandler et al., 2018; Stein et al., 2017). Of those who stated they did not see a relationship, due to the closed-ended nature of the question, there was little explanation offered (Bernard and Ryan, 2010). This is an area that holds the potential for further exploration.

Connection

The question does remain for many communities, particularly in rural and underserved regions, as to how to address a child who has experienced ACEs when the community is lacking the above-mentioned resources (e.g., referral to counseling, education programs). A respected primary care provider in northern New Mexico, Dr. Gina Perez-Baron, stated in reflecting on her experience treating OUD, "Human connection is our best medicine." Connection is something Dr. Perez-Baron seeks to foster in the Alchemy Integrated Medicine model which she describes as being, "intensive, integrated, verified and group therapy-based" and echoes the principles of TIC (Egli, 2018). Others have resonated with the hypothesis that it is not sobriety, but connection that is the opposite of a use disorder (Hari, 2015). At the very least, the provider can connect with the patient at the point of care, can see the patient, communicate intentionally, create a safe space, and get to know the child and their environment. Further, based on the above synthesis of information, investigation of the proposed framework for continuing to develop the connection of at-risk pediatric patients to supportive resources in diverse communities is needed to not only treat but prevent OUD.

Limitations

Due to the developing nature of the project subject matter, there is the possibility that in the time between beginning the project, conducting a primary literature review, and reaching project completion, new discoveries in the field may have been published in the literature. These findings may not have been included in the DNP student's review of

the literature. Therefore, the literature review should not be regarded as exhaustive at the time of dissemination.

Because of the qualitative nature of the project, there exists a significant potential for bias. Prior to conducting the interviews, the DNP student held several hypotheses about the interplay between OUD and ACEs, thus affecting the student's worldview and potential to introduce bias. Further, per the scope of this project, it was not possible for the DNP student to utilize a second coder when analyzing for themes of interest (Bernard & Ryan, 2010). Therefore, the DNP student aimed to eliminate bias by using a standardized framework for analysis. In addition, because the DNP student transcribed the data as the interviews were conducted, the student was able to continually reflect on personal biases, the ways in which interview questions were posed, and the tone of the DNP student's responses. Cautiously, it should be noted the DNP student is a novice to qualitative data collection and analysis, so while care was taken to reflect on personal bias, it is likely that personal bias was more prominent in this project than in projects performed by an experienced qualitative investigator (Strauss & Corbin, 1998). Finally, the standardized structured set of interview question and survey instrument as the sole data collection method eliminated, to some extent, the influence of sifting the participant's experiences through the DNP student's cultural lens and allowed the DNP student to record experiences as the participants experienced them (Bernard & Ryan, 2010). However, the DNP student was aware when selecting key quotations, of a tendency towards an elite bias or over-representing well-articulated interview material. The DNP student made a conscious effort to correct this innate bias by selecting a variety

of key quotations from a variety of participants (Miles & Huberman, 1994). Based on the project design and level of evidence presented, no causal relationships can be drawn from project findings.

In addition, the method of sampling, purposive sampling, is a form of non-probability sampling. This type of sampling has the potential to lack representativeness of the general population (Bernard & Ryan, 2010). As mentioned above, per the scope of this project, it was not possible for the DNP student to validate or confirm project findings (O'Connor & Gibson, 2003). Therefore, generalizability of findings based on this project is limited and should be undertaken cautiously. Based on the sample utilized, findings are most appropriately applicable to pediatric patient populations in the northern New Mexico counties of Taos and Rio Arriba. And yet, further testing of the proposed framework is recommended to verify this generalizability.

Another limitation the project faced was the re-design of several key aspects of the study. Specifically, while no longer accessing electronic health record information further protected sensitive participant information, it did limit the credibility and verifiability of demographic data collected, as this data was based on self-reporting. Most significantly, this change impacted the collection of comorbid diagnosis information. Furthermore, the necessary steps for project re-design, including but not limited to, canvasing the community for supportive organizations, securing alternative clinic sites to conduct interviews, and submitting for an IRB addendum, had the effect of altering the timeline of the project. The effect of the alteration of the timeline was that it affected both

the student's time to continue to recruit participants and condensed time spent in the overall project analysis, synthesis, and presentation phase.

A final limitation of the project is the projected opportunity cost associated with implementation of the proposed recommendations. The demands pediatric healthcare providers face today, particularly in rural and underserved settings (e.g., pediatric primary care clinics, school-based health centers, etc.), impact the ability of these providers to adopt new, time-consuming practice changes. Specifically, the recommendations proposed by this project would cost the provider the time it takes to establish nurturing relationships with the patients, thoroughly understand the family and home environment, and research resources to better enhance patient referral.

Application to Practice

To assess the applicability of the project findings to clinical practice, the proposed framework was sent to a pediatric nurse practitioner who works in Taos County for evaluation. The provider felt that the framework was easy to use and translate to the pediatric setting. However, there remains the complicated issue of how to best implement and execute the recommendations, particularly in communities (such as Taos County) where access to resources (such as counseling, supportive after-school programming, etc.) is limited. In addition, there remains debate in the pediatric community as to whether to implement universal screening for ACEs. Some argue that it is premature to implement universal screening for ACEs in children until a standardized screening instrument has been implemented identify ACEs it is understood how to respond to a high ACE score, and the negative outcomes and costs associated with implementing

universal screening have been evaluated (Finkelhor, 2017). Proponents of universal ACE screening assert that understanding ACE trends is important surveillance for providers to continue to guide medical decision making, develop protective interventions, and develop policy around delivery of trauma-informed care (Dube, 2018). Further, it has been stated, "Screening for ACEs in primary care represents a holistic, patient-centered, trauma-informed strategy" (Kalmakis, 2018, p. 199). Though it is not imperative to implement universal ACE screening to employ the proposed framework developed by this project, it is helpful for identifying the target population. While the American Academy of Pediatrics encourages routine surveillance and screening, this has not yet become widely adopted by providers in pediatric practice (American Academy of Pediatrics, 2014a; Kerker et al., 2015). Thus, to apply this framework to practice, it is likely an individual or practice-level decision would need to be made as to whether to screen for ACEs.

Further Study

Based on the findings of this scholarly project, further study of interventions to prevent OUD specific to ACEs are needed. Specifically, the proposed framework for addressing patients with high ACE scores in clinical practice for the prevention of subsequent OUD needs further evaluation both for feasibility of implementation and efficacy. Further directions for study, based on the recommendations provided by the study participants include the efficacy of trauma informed care to address ACEs and prevent subsequent OUD, cognitive behavioral therapy for the prevention of OUD in those who have experienced ACEs, and the efficacy of evidence-based education programs about opiates, opiate misuse, and mental health to prevent OUD.

Moreover, in discussing the project aim and preliminary results with a community provider who heads several OUD treatment programs, an observation came about regarding the fit of the ACE instrument. Retrospectively, it was debated whether an ACE score of four or greater as an inclusion criterion may have been too high. Particularly when considering that the ACE instrument was designed from studies where participants were primarily white, middle-class patients with health insurance, and most of the interview population were Hispanic, middle-aged males living in rural communities. Some participants expressed that after completing the ACE survey, they felt they had experienced trauma that was significant but not included on the form (e.g., physical abuse that did not happen "often" or sexual abuse that occurred shortly after turning 18). In addition, in reviewing the interviews, the sentiment was expressed that Hispanic males are taught not to share. Specifically, one participant who did not meet the project's inclusion criteria stated, "Especially for Hispanics I think because it's not like a good… We're taught like not to like to be sad. Or you know, or especially as males I think were taught not to like show any kind of like griefness or like crying or anything like that." Therefore, considering that a relationship between higher ACE scores and certain social determinants of health (e.g., average income) has been established, continued efforts to develop an ACE screening tool that is applicable to and inclusive of minority rural patient populations of varied socio-economic statuses is necessary (Finkelhor, 2017; Merrick, Ford, Ports, & Guinn, 2018).

Finally, several participants pointed out that they felt they could not answer the project questions because they did not have access to the resources mentioned in the

interview questions. For example, there were participants who reported they did not see a provider (pediatrician or pediatric nurse practitioner) in childhood or did not have access to a school nurse/counselor. Therefore, further study is needed to assess how to best access vulnerable pediatric patient populations who do not have routine or regular access to varied sources of healthcare.

Conclusion

In conclusion, Dr. Robert Anda, co-author of the landmark ACE study states, "The chronic public health disaster of adverse childhood experiences and their effects on human development are real" (Anda & Brown, 2010, p. 10). Additionally, with the presidential designation of the opiate epidemic as a public health emergency, this project seeks to address two significant public health issues facing the nation currently (U.S. Department of Health and Human Services, 2018). Experts in the field agree it is imperative that the healthcare community work collaboratively to continue to better understand ACEs and ACE-related coping to further support family and individual development. These efforts must extend across practice fields to build programming and community support (Larkin, Felitti, & Anda, 2014). This project uniquely sought to understand the reflections of participants who have the lived experience of both ACEs and OUD and how to best address ACEs and prevent OUD in childhood. The analysis of these responses allowed for the synthesis and creation of a proposed framework for addressing patients who have experienced ACEs to prevent OUD in the healthcare and school settings. Through further investigation of this framework, and evaluation of the

strategies recommended by the participants in this project, the healthcare community can seek to not only understand the ACE and OUD epidemics but address both head-on.

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APPENDICES

APPENDIX A

ACE SURVEY

Prior to your 18th birthday:

1. Did a parent or other adult in the household often or very often... Swear at you, insult you, put you down, or humiliate you? or Act in a way that made you afraid that you might be physically hurt?

No__ If Yes, enter 1____

2. Did a parent or other adult in the household often or very often... Push, grab, slap, or throw something at you? or Ever hit you so hard that you had marks or were injured?

No__ If Yes, enter 1____

3. Did an adult or person at least 5 years older than you ever... Touch or fondle you or have you touch their body in a sexual way? or Attempt or actually have oral, anal, or vaginal intercourse with you?

No__ If Yes, enter 1____

4. Did you often or very often feel that ... No one in your family loved you or thought you were important or special? or Your family didn't look out for each other, feel close to each other, or support each other?

No__ If Yes, enter 1____

5. Did you often or very often feel that ... You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? or Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

No__ If Yes, enter 1____

6. Were your parents ever separated or divorced?

No__ If Yes, enter 1____

7. Was your mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? or Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? or Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

No__ If Yes, enter 1____

8. Did you live with anyone who was a problem drinker or alcoholic, or who used street drugs?

No__ If Yes, enter 1____

9. Was a household member depressed or mentally ill, or did a household member attempt suicide?

No__ If Yes, enter 1____

10. Did a household member go to prison?

No__ If Yes, enter 1____

Now add up your "Yes" answers: _____ This is your ACE Score_____

Age:_____

Gender: _____

Race:_____

Medical Diagnoses:_____

APPENDIX B

INTERVIEW QUESTIONS

1. What is something a pediatrician, school nurse, or counselor could have done to help you cope with trauma in childhood?

2. How would you tell a pediatrician or pediatric nurse practitioner to best respond to a child who has expired 4+ adverse childhood experiences?

3. Do you see a relationship between your childhood traumatic experiences and opiate use?

4. What would have been most helpful to keep you from using opiates?

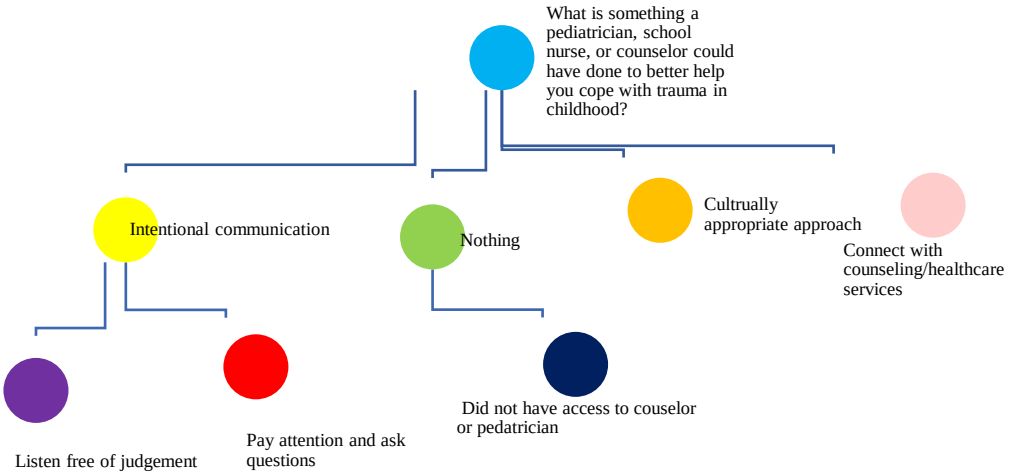
APPENDIX C

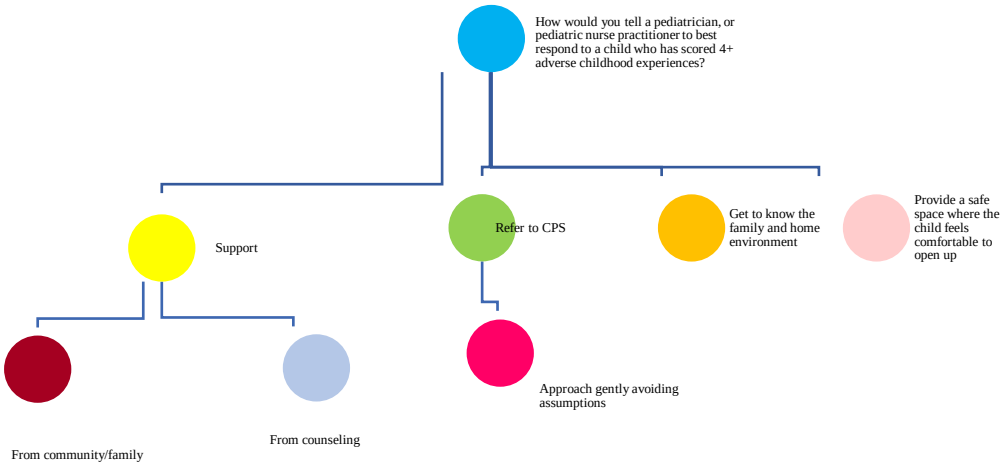
DEMOGRAPHIC DATA

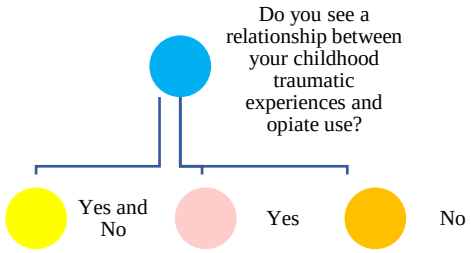
Study ID number	ACE Score	Age	Sex	Ethnicity	First diagnosis (ICD.10 code)	Second diagnosis (ICD.10 code)	Third diagnosis (ICD.10 code)	Fourth diagnosis (ICD.10 code)
T1	4	34	0	1	0	.	.	.
T2	7	39	0	0	0	1	.	.
T3	7	42	1	1	.	.	.	.
T6	6	40	0	0	.	.	.	.
T7	5	24	0	0	1	.	.	.
T8	5	38	1	0	2	3	4	.
T10	6	35	0	0	0	4	5	.
T11	6	33	0	0	0	.	.	.
T12	10	37	1	0	.	.	.	.
T15	5	21	0	0	0	6	1	7
T16	9	45	0	4	0	8	9	.
T18	10	41	1	3	.	.	.	.
A2	6	32	0	0	.	.	.	.
A3	6	38	1	3	.	.	.	.
A5	7	23	0	0	.	.	.	.
A6	5	44	1	0	10	11	.	.
A7	6	32	1	0	.	.	.	.
A8	10	19	0	0	0	7	.	.

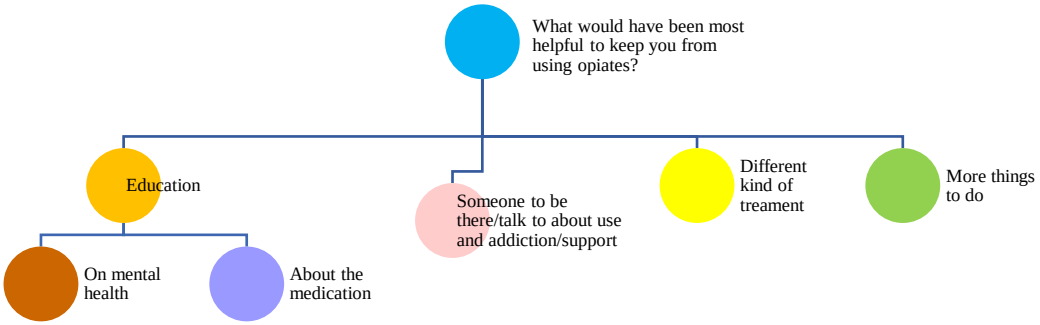
APPENDIX D

VISUAL SCHEMATIC OF CODED THEMES AND SUBTHEMES


What is something a pediatrician, school nurse, or counselor could have done to better help you cope with trauma in childhood?
Intentional communication
Nothing
Cultrually appropriate approach
Connect with counseling/healthcare services
Listen free of judgement
Pay attention and ask questions
Did not have access to couselor or pedatrician


How would you tell a pediatrician, or pediatric nurse practitioner to best respond to a child who has scored 4+ adverse childhood experiences?
Support
Refer to CPS
Get to know the family and home environment
Provide a safe space where the child feels comfortable to open up
Approach gently avoiding assumptions
From community/family
From counseling


Do you see a relationship between your childhood traumatic experiences and opiate use?
Yes and No
Yes
No


What would have been most helpful to keep you from using opiates?
Education
On mental health
About the medication
Someone to be there/talk to about use and addiction/support
Different kind of treament
More things to do