Barriers to access of medical *Cannabis* as a healthcare option for service-connected disabled veterans

by

Mark W. Landess

A.A.S., The Art Institute of Houston, 2005

B.S., Kansas State University, 2011

M.S., Kansas State University, 2013

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

School of Applied Human Sciences

College of Health and Human Sciences

KANSAS STATE UNIVERSITY

Manhattan, Kansas

2022

Abstract

With the discovery of the endocannabinoid system in 1992, a medical and political debate has continued to spread across North America, both in the United States and Canada, for the last 20 years. Currently in the United States, there are 37 states and the District of Columbia that legalize the use of medical Cannabis (MC) by residents of those states diagnosed with a stateapproved medical condition. Since MC is not recognized federally, millions of veterans suffering from service-connected disabilities are not eligible to utilize MC as a medical option. The U.S. Department of Veterans Affairs (VA) follows federal laws, which are not in line with current state laws, and service-connected disabled veterans suffer because they are denied access to a medication that has been shown to help alleviate many of the symptoms associated with the top ten service-connected disabilities. These conflicting laws can create stressful situations, which can affect the veteran and their family's quality of life by limiting the veteran to use traditional medications (TM) commonly prescribed by the VA healthcare provider. This study utilized qualitative research methods, in order to explore lived experiences of service-connected disabled veterans (SCDV's) and their families, where the SCDV utilized MC instead of TM to treat one or more service-connected disability (SCD). The sample consisted of four participating dyads, three were married with the other being in a long-term relationship, all of the participants were White, representing pre-9/11 and post-9/11 SCDV's, who served in either the U.S. Army or U.S. Navy. After the raw data were analyzed, this study uncovered multiple findings that affected these families, including the different factors that led to the SCDV's begin use of MC, stigmas related to medications used by the SCDV, the effects that MC had on these families, the impact that healthcare had on these families, as well as the future hope that these families had. All of these findings were affected by the use of MC by the SCDV.

Barriers to access of medical *Cannabis* as a healthcare option for service-connected disabled veterans

by

Mark W. Landess

A.A.S., The Art Institute of Houston, 2005 B.S., Kansas State University, 2011 M.S., Kansas State University, 2013

A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

School of Applied Human Sciences College of Health and Human Sciences

KANSAS STATE UNIVERSITY Manhattan, Kansas

2022

Approved by: Approved by:

Co-Major Professor Maurice M. MacDonald Co-Major Professor Bradford B. Wiles

Copyright

© Mark W. Landess 2022

Abstract

With the discovery of the endocannabinoid system in 1992, a medical and political debate has continued to spread across North America, both in the United States and Canada, for the last 20 years. Currently in the United States, there are 37 states and the District of Columbia that legalize the use of medical Cannabis (MC) by residents of those states diagnosed with a stateapproved medical condition. Since MC is not recognized federally, millions of veterans suffering from service-connected disabilities are not eligible to utilize MC as a medical option. The U. S. Department of Veterans Affairs (VA) follows federal laws, which are not in line with current state laws, and service-connected disabled veterans suffer because they are denied access to a medication that has been shown to help alleviate many of the symptoms associated with the top ten service-connected disabilities. These conflicting laws can create stressful situations, which can affect the veteran and their family's quality of life by limiting the veteran to use traditional medications (TM) commonly prescribed by the VA healthcare provider. This study utilized qualitative research methods, in order to explore lived experiences of service-connected disabled veterans (SCDV's) and their families, where the SCDV utilized MC instead of TM to treat one or more service-connected disability (SCD). The sample consisted of four participating dyads, three were married with the other being in a long-term relationship, all of the participants were White, representing pre-9/11 and post-9/11 SCDV's, who served in either the U.S. Army or U.S. Navy. After the raw data were analyzed, this study uncovered multiple findings that affected these families, including the different factors that led to the SCDV's begin use of MC, stigmas related to medications used by the SCDV, the effects that MC had on these families, the impact that healthcare had on these families, as well as the future hope that these families had. All of these findings were affected by the use of MC by the SCDV.

Table of Contents

List of Tables	viii
Acknowledgements	ix
Dedication	xi
Preface	xiii
Chapter 1 - Introduction to the Problem	1
Purpose and Rationale	5
Chapter 2 - Theoretical Foundation	8
Ecological Systems Theory	8
Contextual Model of Family Stress	10
Qualitative Research Approach	13
Literature Review	14
Top Ten Service-Connected Disabilities and Medical Options	21
Effects of Service-Connected Disabilities on the Family	25
The Endocannabinoid System	28
Adverse Effects of MC Usage	31
Chapter 3 - Methods	33
The Researcher	33
Participants	36
Recruitment	38
Research Design	40
Chapter 4 - Findings	48
Research Questions	48
Summary	123
Chapter 5 - Discussion	125
Summary of the Findings	125
Applying Guiding Theories	127
Implications for Research	128
Implications for Practice	131

Implications for Policy	133
Recommendations for Future Research	136
Limitations	137
Conclusion	139
References	141

List of Tables

Table 1.	States That Legalize Medical Cannabis.]
Table 2.	Most Prevalent Service-Connected Disabilities of All Compensation Recipients	4
Table 3.	Analysis of Findings Themes and Sub-Themes	53

Acknowledgements

First, I need to thank the people who took the time to inquire about my study, those who passed along my recruitment information, and those who were able to participate in my study. Without all of you, this research would not have been possible. I am forever grateful for your time and help. I also need to acknowledge that this research was funded in part by Kappa Omicron Nu, Hettie M. Anthony Fellowship. Second, I would like to acknowledge the members of my committee. Dr. Wiles, without your guidance and direction, this never would have taken shape. The hours and energy you dedicated to me show your level of commitment and desire for me to succeed. Your friendship and counsel were always welcome, and often steered me back on track when needed. I am forever grateful to you, and I would be honored to work with you again. I will also forever remember not to use the word "very" in my future writings, and what it means. Dr. MacDonald, you have been a guiding light for me throughout my graduate studies. You were not only willing to join my Ph.D. committee, but without your guidance during my master's degree, my goals of earning a Ph.D. would not have come to fruition. I cannot thank you enough for the years you have spent working with me, helping me to become a better researcher, educator, and person. Dr. Morgan, I am grateful for the opportunity to collaborate with you. I am also thankful that you agreed to join my committee, and for your theoretical understanding. Dr. Nelson-Goff, it has been a long, long time coming, and I cannot thank you enough for continuing the journey with me. I will always remember our talk over sushi, and the time you took to meet with me. Without the assistance of all the members of my committee, this study and my dissertation would not have been possible. I am forever thankful and grateful to each and every one of you. Lastly, I wanted to thank all of the staff within the School of Applied Human

Sciences for assisting me throughout the years. There are many others that have helped me on my journey, and for those I have not mentioned, thank you all.

Dedication

First, I would like to dedicate this study to all the veterans with diagnosed and undiagnosed service-connected disabilities. Always remember that it will get better, so never give up and never stop fighting — the world needs more of us. Also remember that we can accomplish anything we set our minds to, regardless of our limitations and disabilities.

Second, I would like to dedicate this to my mother, who never got to see me finish. I know that it would have meant the world to have seen me finish and graduate, but you will be there in my heart. Without you always sticking up for me and supporting me during my early educational struggles and being there to pick me up when I fell, I would never have thought about going to college, much less earning my Ph.D. Thank you for everything you did for me. I love you.

Third, I need to dedicate this my wife, who has fully supported me throughout my graduate studies. I cannot thank you enough for everything you did and do, not only for me but for our family. When it seemed that I lived in the office, I always knew that you were taking care of everything else so I could focus solely on my Ph.D. I also know that the road has been long, but you have remained my biggest supporter, and my biggest motivator. I love you.

Fourth, I need to dedicate this to my daughter, who always brightens my days. You are an amazing person, who shows me each day that happiness and love are unconditional. I know that my being in graduate school most of your teenage years has been hard, but I hope you have learned to follow your dreams and goals, no matter how old you are. You are going to change the world with your ideas. I hope that you know how much you mean to me. You are my life, my world, my love, my Maya.

Lastly, I need to dedicate this to my father, without whose support I could not have completed my Ph.D. You were always there in times of need, and not. You always called to check-in and see how I was doing, as well as how my research was going too. I thank you for all of your help. I love you.

I love all of you with all of my heart. Thank you for all of your support and love.

Preface

I am fortunate enough to have served in the U.S. Navy, where I was selected and trained as a Seabee. Unfortunately, after multiple joint surgeries, I was honorably discharged under medical conditions from the military. Prior to being discharged I applied for and was enrolled into the VA healthcare system immediately upon my separation from service, thereby making me a service-connected disabled veteran literally overnight. Since my initial enrollment into the VA healthcare system, my original VA disability rating has continued to increase, coinciding with a continued increase in the number of service-connected disabilities I'm rated for. I am currently rated at 90% disabled, and have physical, learning, and mental disabilities. In addition, I am currently receiving treatment for five of the top ten service-connected disabilities, at my local community-based outpatient clinic and the regional Veterans Affairs Medical Centers, as well as within my local community through TriWest.

For seventeen years following my enrollment into the VA healthcare system, I was prescribed a minimum of eight different traditional medications, in addition to at least one, and sometimes two different types of opioid pain medications. Tragically, until recently (i.e., 2016), I was allotted extremely large doses of opioid pain medications daily for my service-connected disabilities. Thankfully, in 2016 I relocated to a state that recognizes the use of *Cannabis* as a medicine, and I began participating in my states medical *Cannabis* program. Since I started utilizing medical *Cannabis*, I have stopped using all opioid medications. I am also fortunate that I had private insurance through my wife's employment and am able to see a medical provider outside of the VA who could sign my state-required paperwork.

Regrettably, my medical *Cannabis* use effected the level of care that I have received from the VA, and this has caused much undue stress in my, and my family's lives. I lived on the

border of two states, one that recognizes medical *Cannabis*, and one that does not. This created a conflict, because according to VAH directive 1315, veterans who live in states that recognize medical *Cannabis* may participate in their state programs. Unfortunately, instead of following the directive, many VA healthcare providers did not recognize my claim of medical use of medical *Cannabis*. Instead, VA providers labeled me as "*Cannabis* addicted" asked me to sign a VA opioid contract, and thereby denied me medications to assist with pain management, because within the contract it states that "I will not use illicit drugs, including *Cannabis*" (*Appendix* B). This is one of the major pitfalls that many service-connected disabled veterans fall into without knowing it, but it is in no way the only VA pitfall for service-connected disabled veterans looking to utilize medical *Cannabis*.

Chapter 1 - Introduction to the Problem

The focus of this study will only examine medical *Cannabis*¹ use by service-connected disabled veterans (SCDVs), and not recreational *Cannabis* use, which is outside the scope of this investigation. Currently in America, there are 37 states and the District of Columbia (Table 1), that recognize the use of *Cannabis* as a medical option for residents living in these states, who wish to participate and who have a state-approved medical condition (ProCon.org, 2022). For veterans who are currently living in one of these states, their medical option to utilize medical *Cannabis* (MC) is limited, and oftentimes restricted by the Veterans Affairs (VA) rules and regulations, thereby limiting many SCDV's to utilize traditional medications (TM) prescribed by the VA healthcare providers.

Table 1. States That Legalize Medical Cannabis.

State	Year Passed	Annual Registration Cost	Accept Other State MC Cards
Alabama	2021	Unknown	Unknown
Alaska	1998	\$25 New, \$20 renewal	No
Arizona	2010	\$150, \$75 for low-income	Yes, but visiting patients cannot obtain MC
Arkansas	2016	\$50	Yes, visiting form required
California	1996	Not to exceed \$100	No
Colorado	2001	\$25	No
Connecticut	2012	\$100	No

¹In this study I utilize the Latinate genus term *Cannabis* in place of negativity connotated term Marijuana/Marihuana. During the 1930's, the term marijuana/marihuana was used to solicit negative public perception regarding *Cannabis* based on racial minority's use of *Cannabis* (Brooks, 2016).

Delaware	2011	\$125	No
Florida	2016	\$75	Unclear
Hawaii	2000	\$35 + \$3.50 fee	Yes, 60-days for \$49.50
Illinois	2013	\$100/\$50 for veterans enrolled in SSDI for 1-year, \$200/\$100 for 2-years, \$250/\$125 for 3-years	No
Louisiana	2016	Unknown	Unknown
Maine	1999	\$0	Yes, but visiting patients cannot obtain MC
Maryland	2014	\$50	No
Massachusetts	2013	\$50	No
Michigan	2008	\$60	Yes
Minnesota	2014	\$200, \$50 for personas on SSDI	No
Mississippi	2020	\$50	No
Missouri	2018	\$25	Unknown
Montana	2004	\$5	No
Nevada	2001	\$100 New, \$75 renewal	Yes, with an affidavit
New Hampshire	2013	\$50	Yes
New Jersey	2010	\$200 for 2-years, \$20 for patients qualifying for assistance programs	No
New Mexico	2017	No fee	No
New York	2014	\$50	No
North Dakota	2016	\$50	No
Ohio	2016	\$50	No

Oklahoma	2018	\$100 for 2-years, \$20 for patients on Medicaid, Medicare, or SoonerCare	Yes, \$100 for a 30-day MC card
Oregon	1998	\$200, \$60 patients receiving SNAP, \$50 patients on Oregon Health Plan, \$20 patients receiving SSI or veterans	No
Pennsylvania	2016	\$50	Unknown
Rhode Island	2006	\$50, \$25 for patients on Medicaid or SSI	Yes, but only for condition approved in RI
South Dakota	2020	To be determined	No
Utah	2018	To be determined	Unknown
Vermont	2004	\$50	No
Virginia	2020	\$50 State registration fee, \$150 MCC	No
Washington	1998	\$1	No
Washington D.C.	2010	\$100, \$25 for low-income patients	Yes
West Virginia	2017	To be determined	No

According to recent data provided by the United States Census Bureau, in 2015, 1.4 million individuals, or 0.4% of the United States (U.S.) population, were currently serving in the U.S. military at the time the data were collected (Selected Economic Characteristics, 2015; U.S. Census Bureau, 2017). While this might be considered an exceedingly small proportion of the total U.S. population, investigators and researchers need to understand that when these individuals leave the military, most of them will be considered veterans.

Once military members make the transition into civilian life, most will be recognized as veterans, adding to the cumulative total of veterans in the U.S. According to data provided by the U.S. Census Bureau's 2017 American Community Survey, there are 18.2 million (7.3%) veterans currently living (U.S. Census Bureau, 2017). Additionally, approximately 20% (4.3 million) of all veterans had at least one of the service-connected disabilities (SCD), which the VA rated between 10% and 100% disabled (Bureau of Labor Statistics, 2015; VA Compensation Data, 2018). Between 2015 and 2018 there was an increase of 5% in the total number of SCDV's, bringing the total to about 4.7 million (25%) SCDV's who were receiving VA medical care and disability benefits (Bureau of Labor Statistics, 2018; VA Compensation Data, 2018). Many veterans often have more than one SCD, thereby increasing the veterans VA SCD rating (VA Compensation Data, 2018).

The Department of Veterans Affairs maintains vital records on the top service-connected disabilities (SCD) that impact veterans, thereby providing researchers with valuable data regarding SCDV's and the SCD that effect their lives and the lives of their families. According to data that the VA released in 2018, the top-ten SCD's accounted for more than 38.7% of all SCDV's SCD's (VA Compensation Data, 2018). Table 2 provides information regarding the top-ten SCD's, as well as additional information regarding the gender breakdown for each of the top-ten SCD's.

Table 2. Most Prevalent Service-Connected Disabilities of All Compensation Recipients.

Disability	Female Veterans Affected (%)	Male Veterans Affected (%)	Total Veteran Population Affected (%)
Tinnitus	3.6	8.4	7.8
Hearing Loss	0.8	5.4	4.9
Posttraumatic Stress Disorder	3.1	4.3	4.1

Scars, General	4.1	4.1	4.1
Limitation of Flexion, Knee	4.7	4.0	4.1
Lumbosacral or Cervical Strain	5.2	3.8	3.9
Paralysis of the Sciatic Nerve	2.2	3.2	3.1
Limitation of Motion of the Ankle	2.6	2.6	2.5
Migraine	4.4	1.9	2.2
Degenerative Arthritis of the Spine	2.0	2.0	2.0
Total Most Prevalent Disabilities	32.7	39.7	38.7

For this research, I created category clusters for the top-ten SCDs, based on the common types of symptoms that each SCD often presents. I created five categories, including the following: *Tinnitus and/or hearing loss, Post-Traumatic Stress Disorder* (PTSD), *scars, migraines,* and *chronic pain and inflammation* (limitation of flexion, knee; lumbosacral or cervical strain; paralysis of the sciatic nerve; limitation of motion of the ankle; degenerative arthritis of the spine). Researchers must bear in mind that oftentimes veterans are diagnosed with more than one SCD, thereby causing comorbidity issues with treatment and symptomology (VA Compensation Data, 2018).

Purpose and Rationale

The primary purpose of this study was to conduct a qualitative investigation examining the complex relationship between the uses of traditional medications (TM) and medical *Cannabis* (MC) in treating veterans who are suffering from one or more of the top-ten SCD's. Through this investigation, I examined how each of the different types of medications can affect

the overall quality of life for veterans and their families, specifically those who are currently diagnosed with one or more of the top-ten SCD's. Additionally, this study looked to gain a deeper understanding of the experiences of SCDV's in navigating national and state policies currently affecting what medication options are legally available to veterans.

Research into the areas of MC has greatly increased over the last two decades in the U.S. and has explored many different topics related to the body and mind, but these studies tend to take a deficient-based approach instead of strengths-based approach (Baron, 2018). The majority of this research has been conducted using biological, psychological, or neurological lenses as the basis of the studies. Additionally, most research about veterans and their families examines two primary areas related to *Cannabis*: the relationship between families and drug abuse, and the impact of drug use on child development. Family relationships and dynamics are some of the key areas that have been under investigated but directly relate to quality-of-life issues for many SCDV's who are currently using MC and their families. This study helped to close this gap in family science research literature.

This study also looked to answer the question, "What effect does MC have on SCDV's individually" and "family functioning from a human development and family science perspective". Research examining how parents talk and communicate with their children, not only about the veterans' illnesses, but about them starting a *Cannabinoid* regiment that could help increase both their physical and emotional wellbeing. This study planned to begin looking at some of these complex family relationships and how the use of MC, by a SCDV parent currently suffering from a SCD, affected those relationships not only between veteran and spouse, but also between parent and child. All members of the family system are directly affected by the health struggles of another member of the family; often, this is more common if the sick family member

is a parent. These effects on the family can be made worse when the issue is compounded by not one, but two or more SCD's (mental and/or physical) that the veteran may be experiencing simultaneously (VA Compensation Data, 2018).

Chapter 2 - Theoretical Foundation

Currently, researchers utilize a multitude of theories and theoretical frameworks when investigating issues surrounding veterans diagnosed with one or more of the VA's top-ten SCD's, and the effects these can have on their families. And while no theory is infallible, each provides a unique lens in which to investigate an issue, and many can, and should be used in combination. Oftentimes researchers utilize theories in combination in order to fill in the missing gaps or limitations that an individual theory may possess. Likewise, researchers also utilize theories in combination to build upon the strengths that each theory adds to a study, as well as helping to lay the theoretical foundation for their research. I believe the two most relevant family theories which are best suited to help explain the impact a VA top-ten SCD can have on the veteran and their family's overall quality of life are Ecological Systems Theory (Bronfenbrenner, 1979, 1986, 1994), and the Contextual Model of Family Stress (Boss, Bryant, & Mancini, 2017).

These two theories work in combination to assist in developing a better understanding of how the family's external and internal systems help them to make meaning of their current situation or context. Moreover, by understanding how these families perceive and attach meaning to the events that transpire within their different systems, researchers are better equipped to understand the stressors that can stress these families to the point of crisis.

Ecological Systems Theory

The ecological systems theory (EST) is well suited to the study of families. It utilizes a systemic approach that allows one to study the interactions within and between the systems. It is understandable that individuals and families (micro-system) are affected by the multiple systems surrounding them (meso-, exo-, macro-, and chrono-system). Additionally, this theory allows family professionals to examine different units of analysis, including the individual (i.e., each

family member), the family (i.e., the whole household), and the societal (i.e., state and national). By looking at each family member through the EST lens, researchers can investigate the interconnections within the family by examining the family system as a whole (Bronfenbrenner, 1979, 1986, 1994). In addition, this theory also allows researchers to investigate the interconnections between the individual/family and other social systems, thereby reflecting the idea that the system affects its environment, and that the environment affects the system (Bronfenbrenner, 1979, 1986, 1994).

EST is also well suited for examining families with a parent who is a SCDV who is currently diagnosed with one or more SCD by investigating how each family member affects one another. In addition, EST also allows researchers to view how these families affect their other systems (i.e., school, work, healthcare, community, state, federal), and how these systems impact inward to affect the family and the individuals within the household. Additionally, EST provides a historical time component that allows researchers to utilize the chrono-system, to examine how past events have created current social norms, values and beliefs that can affect the SCDV and their family. The chrono-system also allows us to examine how SCDV's and their families can cause change to these norms, values, and beliefs in the future, based on the family's current needs.

Advantages and Limitations of EST

One of the main advantages of utilizing EST is its versatility. By this, I mean that researchers can place the individual, the family, the household, the neighborhood, or the community within the center of the model, and in doing so they can investigate the impact that the larger cultural or national systems can have on these systems. Regrettably, versatility is also one of EST's limitations, and this should be considered when deciding to utilize EST when

studying families with a parent who is a SCDV. If researchers wish to investigate and interview a group of SCDV's and their families, and if they plan to utilize EST with the group in the microsystem, their findings might be inaccurate. This is due to the concept that not everyone, or every family within the group being studied, affects, or is affected by the same meso-system, exosystem, or macro-system. Because of this, each group may have access to different resources and support within their systems that other SCDV's and their families may not have in theirs, and these differences could cause varied outcomes for each family.

Contextual Model of Family Stress

The contextual model of family stress (CMFS) is predicated on the axiom that all families experience stress, and that any family can be stressed to the point of crisis, based on how the family perceives and attaches meaning to the stressor (Boss, Bryant, & Mancini, 2017). In addition, the family's internal context contains their values and beliefs, and these values and beliefs influence how the family defines distress and creates meaning of it (Boss, Bryant, & Mancini, 2017). Additionally, the family's values and beliefs can be influenced by their external context (e.g.., culture, history, economy) that house larger societal norms, which may be in conflict with the family's norms (Boss, Bryant, & Mancini, 2017). It is for these reasons I believe that the CMFS is appropriate for examining the stress that being a SCDV can cause within the family system and the factors that might lead to successful functioning.

The CMFS is key to helping researchers examine the larger societal (external) context that SCDV's and their families live in and how it influences the way a family perceives an event or stressor (Boss, Bryant, & Mancini, 2017). This is extremely important when trying to investigate how historical and cultural events have shaped current VA and federal policy in regard to MC and equal access to this medical option by SCDV's. Additionally, these same

external values and beliefs are beginning to be challenged by SCDV's, their families, as well as the medical community, in order to bring about change to current policies and allow SCDV's to make their own decisions regarding their healthcare.

The CMFS also provides researchers with a tool to explore how the family's internal context impacts the decisions they make as a family, founded on the meaning that the family attaches to the stressor (Boss, Bryant, & Mancini, 2017). Their internal context also consists of their values and beliefs, as well as their perception about who is in their family and what roles they are assigned (Boss, Bryant, & Mancini, 2017). This is important because when a military member is honorably discharged from the military for medical reasons, they oftentimes become a SCDV quickly and may encompass a separation from family during their hospital stay and recovery (Military Medicine, 2014). This can cause the family members to become unclear about if the SCDV is in or out of the family due to their ambiguous medical absence, as well as who is supposed to fill the SCDV's roles while they are absent, all of which can lead to boundary ambiguity. Many of these families recover and reorganize in order to function, all of which can be undone once the SCDV returns home (Military Medicine, 2014; Warchal et al., 2011).

Upon their homecoming, they may expect to resume their roles, but due to their SCD, they may be unable to, leading to role ambiguity. And if they are able to resume some or all of their roles within the family, the other family members who have been fulfilling those roles will be faced with role reduction, thereby causing role ambiguity for them. This can lead to family strain and eventual crisis, impacting the overall health of all the members of the family (Military Medicine, 2014; Warchal et al., 2011). It is important to remember that while all of this is happening within the family's internal context, the family can also be stressed by events happening in their external context at the same time.

Advantages of CMFS

The main advantage of using CMFS is that I can examine how external context has shaped current federal and VA policies relating to MC, and how the values and beliefs (i.e., internal context) of SCDV's and their families shape their perceptions about MC use by the SCDV. This is an important concept, because even if the veteran lives within one of the 36 states or Washington D.C., which recognizes the medical use of *Cannabis*, their participation in their state's MC program still puts them at odds with current federal laws and VA regulations. This means they are subject to federal prosecution should the federal government decide to start enforcing current U.S. *Cannabis* laws within these states. In addition, the VA can withhold benefits and services, including medical, to SCDV's who utilize MC. In either case, the SCDV and their family's internal context is being stressed by their external context, which can lead to family crisis.

Limitations with CMFS

The main limitation of the CMFS is that stressors and stressful events are viewed differently by each family because every family attaches their own family constructed meaning to any given situation. So, what one family might perceive as being a stressful event, other families may perceive as being a positive event, or even a crisis event, based on the family's shared meaning and history (Boss, Bryant, & Mancini, 2017). Trying to explore how federal laws and VA regulations can cause adversity in these families might be limited because not all SCDV's and their families will perceive this as a stressor, as not all SCDV's choose to utilize MC.

Qualitative Research Approach

In addition to using EST and the CMFS as my theoretical foundation, I will be utilizing two different qualitative approaches to help guide my inquiry. First, I will be employing a constructivism lens to assist in understanding the constructed realities and truths that SCDV's and their families create (Patton, 2002). This lens also aids in understanding how these constructed beliefs and family values can cause the SCDV's and their family's behaviors to generate consequences within their other systems. A prime example of this is when a SCDV chooses to participate in their state's MC program and the consequences this can have on their VA healthcare. Second, I will be using the phenomenological approach to help understand how these families make sense of the lived experiences they endure and the meaning they assign to it (Patton, 2002). Moreover, the meanings that these families construct affects how they interpret the world around them. This is key when trying to understand how SCDV's and their families perceive the effects of MC usage and the meanings they attach to it.

The linkages between both approaches are in the meanings that SCDV's and their families create for the experiences they live through and the effects these meanings can have on the values and beliefs that these families co-construct together. In addition, these family values and beliefs aid them in making sense of the world around them and their place in it, thereby creating the family's subjective truth. The subjective truths that SCDV's and their families construct and live by determines their behaviors and the consequences these might cause within their other systems. Lastly, both of these approaches lend credence to EST and the CMFS, by assisting in understanding how SCDV's and their families create meaning in their lives, how these meanings influence their perceptions of stressors and events, and the effects these can have within the many different systems that SCDV's and their families interact with on a daily basis.

Literature Review

History of Medical Cannabis

Humans have a history with *Cannabis* that dates back almost five-thousand years (Ko et al., 2016). In addition, Leung (2011) points out that archeologist have found *Cannabis* fibers incorporated into ancient textiles and papers that date back to 4000 BC. Furthermore, *Cannabis* has been documented for its use as a medicine since 2700 BC, and some believe even before, when the Chinese text *Shen-nung Pen-tsao Ching* recommended the use of *Cannabis* for the treatment of rheumatic pain, fevers, malaria, and constipation, among other illnesses (Cohen, 2006; Ko et al., 2016; Leung, 2011; Thomas, 2010). Additionally, *Cannabis* became a widely accepted medicine in the U.S. when in 1851, it was included in the U.S. Pharmacopoeia (Thomas, 2010).

1937 Marijuana Tax Stamp Act

In the early 1930s, *Cannabis* was routinely prescribed by U.S. physicians for the treatment of rheumatism, convulsions, migraines, and mental depression, among other illnesses, but this ended abruptly with the passage of the 1937 Marijuana Tax Stamp Act (Cohen, 2006; Galliher & Walker, 1977; Hoffmann & Weber, 2010; Thomas, 2010). This act imposed a tax of \$1.00 per ounce of *Cannabis* that was purchased for medical use, and a tax of \$100.00 per ounce for any other use (Thomas, 2010). One of the main antagonists leading the charge against MC, was the director of the recently created Federal Bureau of Narcotics (FBN), the predecessor to the Drug Enforcement Agency, Harry J. Anslinger (Brooks, 2016; Galliher & Walker, 1977; Ko et al., 2016; Leung, 2011).

As the director of the FBN, Mr. Anslinger was the main supporter of the 1937 tax stamp, and many of his most notable quotes can be found in his statements to Congress, which are

within the Congressional archives. In reading many of his more colorful quotes, it is clear to see that Mr. Anslinger used racial motivations, which were extremely prevalent during the 1930s, to help push the FBN's agenda of passing the 1937 Tax Stamp Act, which he and the FBN succeeded in doing (Brooks, 2016; Galliher & Walker, 1977; Ko et al., 2016; Leung, 2011). In addition to using racial fear, Mr. Anslinger also denounced a five-year study conducted by the American Medical Association (AMA) showing the benefits of using MC (Brooks, 2016; Galliher & Walker, 1977; Ko et al., 2016; Leung, 2011). It should be noted that the AMA has realigned its beliefs and research findings to align with federal laws since the passage of the 1937 Marijuana Tax Stamp Act (Brooks, 2016; Galliher & Walker, 1977; Ko et al., 2016; Leung, 2011).

The newly created 1937 Marijuana Tax Stamp Act did not make the use of MC illegal, instead it imposed extremely high taxes on the sales of *Cannabis* for both the patient and provider (Cohen, 2006; Galliher & Walker, 1997; Hoffmann & Weber, 2010; Thomas, 2010). Researchers have pointed out that in 1937, during the Great Depression, the FBN was under the Department of the Treasury, and this might have influenced Mr. Anslinger's push to get the Tax Stamp Act passed, knowing that current U.S. situations limited spending (Brooks, 2016; Galliher & Walker, 1997; Ko et al., 2016). It also needs to be noted that during his statements to the U.S. House of Representatives and Congress, Mr. Anslinger stated that there would not be a need to appropriate any additional funds if the bill was enacted (Galliher & Walker, 1997). The reality is that current enforcement of *Cannabis* prohibition costs about \$7.7 billion annually in the U.S. (Leung, 2011).

Controlled Substance Act

It was not until the creation of the Controlled Substance Act (CSA) by President Richard Nixon in 1970 that *Cannabis* entered its current illegal status in the U.S. (Cohen, 2006; Galliher & Walker, 1997; Hoffmann & Weber, 2010; Thomas, 2010). Since 1970, *Cannabis* has been listed as a Scheduled-I drug, meaning the federal government does not recognize any medical uses of *Cannabis*. Some researchers find the federal government's claim that *Cannabis* has no medical usages to be inconsistent, since the Food and Drug Administration (FDA) approves the use of synthetic forms of *Cannabis*, including nabilone (Cesamet), dronabinol (Marinol) and nabiximols (Sativex), all of which are orally administered (Khaiser et al., 2016; Ko et al., 2016). In stark contrast to federal law, California became the first state to legalize the use of *Cannabis* as a medicine in 1996 (ProCon.org, 2022). Since 1996, 36 other states and Washington D.C. have enacted legislation that decriminalized the use of *Cannabis* as a medicine for those individuals who have a state-approved medical condition (ProCon.org, 2022).

Cannabis and the Military

Individuals who wish to join the military are taught even before enlistment that *Cannabis* can affect their military membership. This starts pre-enlistment when all hopeful enlistees must disclose any and all drug usage they have had in the past. What most pre-enlistees do not know is that any disclosure on their part about drug use requires a "moral" or "drug" waiver to be generated in order for them to be eligible to join their chosen branch (Govinfo.gov, 2018). Additionally, certain types of drugs disqualify individuals immediately, as can duration and number of times certain drugs have been used, meaning these individuals cannot be granted a waiver (Govinfo.gov, 2018). In order to ensure that incoming members are drug free, everyone is given a urinalysis at the Military Entrance Processing Station, otherwise known as M.E.P.S.,

before they are sworn in (Govinfo.gov, 2018). This is followed by a urinalysis immediately upon their arrival at bootcamp, in addition to annual and random testing throughout their time in the military (DoD Drug Policy Handbook, 2020).

The U.S. military first enacted regulations about military members and drug use and the use of uranalysis on April 4, 1974, but this did little to deter drug use (DoD Drug Policy Handbook, 2020). It was not until December 28, 1981, when current regulations regarding the punitive actions against service members for failed urinalysis were issued by the Deputy Secretary of Defense Frank Carlucci (DoD Drug Policy Handbook, 2020). It should also be noted that if a prospective service member has to receive two or more waivers before bootcamp, they can be ineligible to enlist and can even be released from bootcamp or active duty should they fail their bootcamp urinalysis (Govinfo.gov, 2018). Lastly, pre-enlistment drug use can limit the types of military jobs these individuals are eligible for, especially should they wish to become special operation forces (Govinfo.gov, 2018).

When military members fail a urinalysis, they are subject to punitive actions by the military. In addition, when military members fail a urinalysis, they are punished by being restricted to base, reduction in rank, loss of one and a half month pay, and extra duty, often followed by the court-martial and a dishonorable discharge.

Becoming a Service-Connected Disabled Veteran

According to data provided by the U.S. Census Bureau's 2017 American Community Survey, there are 18.2 million (7.3%) veterans currently living (U.S. Census Bureau, 2017). Additionally, approximately 20% (4.3 million) of all veterans had a service-connected disability (SCD), which the VA rated between 10% and 100% disabled (Bureau of Labor Statistics, 2015; VA Compensation Data, 2018). Between 2015 and 2018 there was an increase of 5% in the total

number of SCDV's, bringing the total to about 4.7 million (25%) SCDVs that were receiving VA medical care and disability benefits (Bureau of Labor Statistics, 2018; VA Compensation Data, 2018).

VA Healthcare

When SCDVs have one or more SCD, their mental health and daily functioning can begin to deteriorate to the point that a major depressive disorder (MDD) develops or is exasperated (Nicholl et al., 2014). This in turn can further aggravate the veteran's other SCD's and the effects they have on the veteran's family. One positive is that most Veteran Affairs medical centers (VAMC) offer a full range of medical services for veterans, including behavior health services and family counseling. Moreover, veterans can receive medical care for illnesses other than their SCD, ranging from preventative care (e.g., flu shots) to emergency room visits and most treatments in-between, free of charge at VAMC's.

Medical Insurance Options

When it comes to medical insurance options, SCDV's are eligible to enroll into VA healthcare, which enables them to seek medical services at a VAMC or a community based outpatient clinic (CBOC) if they do not live near a VAMC (Huang et al., 2018). In addition, a SCDV's VAMC primary care physician (PCP) can order other services within their local community through TriWest or TRICARE (Huang et al., 2018). TriWest is partnered with the VA and utilizes a network of community providers to help provide medical services for SCDV's in their local communities (Huang et al., 2018). TRICARE provides similar services, but it is the Department of Defense (DoD) healthcare program and is primarily aimed at active-duty military members who can receive services from VAMC's and military retirees who served at least 20 years and whom, upon retirement, received a SCD rating from the VA (Huang et al., 2018).

Recent data suggests that only between 55% (Lee et al., 2015) to 61% (Huang et al., 2018) of Operation Enduring Freedom (OEF, Afghanistan), Operation Iraqi Freedom (OIF, Iraq), and Operation New Dawn (OND, Iraq) veterans who are eligible to receive VA healthcare, obtained services from a VAMC.

Medicare and Medicaid

Furthermore, SCDVs may qualify for either Medicare or Medicaid and can use this insurance in conjunction with their VA healthcare (Huang et al., 2018). It is important to remember that VA health insurance is always considered the SCDV's primary insurance, and any additional insurance is considered secondary (VA enrollment coordinator, personal communication, 2017). It is also relevant to discuss the differences between Medicare and Medicaid here, because certain SCDV's who are under the age of 65 may still qualify for Medicare, while others might qualify for Medicaid. If the SCDV has certain types of disabilities (e.g., end stage renal disease, (ESRD)) or amyotrophic lateral sclerosis (ALS), or if their other SCD's are severe enough that they qualify for Social Security Disability benefits, then they are enrolled, usually automatically, into Medicare (Medicare.gov, 2019). Medicaid is a state and federal insurance program that covers specific groups including low-income individuals and families, qualifying pregnant women and children, as well as anyone receiving Supplemental Security Income (Medicaid.gov, 2019). Recent data indicate that about 51% of SCDV's who were currently enrolled into VA healthcare were also receiving Medicare coverage, compared to about 6% who reported being covered by Medicaid (Wang et al., 2019).

Private Insurance

Veterans are also eligible to apply for private insurance through their, or their spouse's, place of employment, should it be offered (Huang et al., 2018). Alarmingly though, in 2017, only

about 23% of SCDV's reported having coverage through private insurance (Huang et al., 2018). Because of this, almost all SCDV's are only eligible to receive their healthcare services from VAMC's and are ineligible to apply for private insurance through the affordable care act (Healthcare.gov, 2019).

Barriers with VA Healthcare

This is one of the main obstacles for equal access to MC as a healthcare option for most SCDV's. While the VA did pass Veterans Health Administration (VHA) directive 1315 on December 8, 2017, to allow SCDV's to participate in their state MC programs, physicians employed at VAMC's are unable to recommend MC or to sign state required paperwork, since the VA is a federal entity (Publichealth.VA.gov, 2017).

Recent legislative efforts have attempted to address this issue and other issues related to MC, including conducting clinical research trials about the effects of MC. Until the federal government reschedules *Cannabis* from a schedule I to a schedule II, the VA is opposed to permitting VAMC employees from assisting SCDV's with completing state-required MC paperwork or conducting clinical trials and research regarding the therapeutic uses of MC (Leung, 2011; Thayer, 2019). By limiting most SCDV's to only being eligible for VAMC healthcare services, they are thereby confined to utilize only TM that are offered by the VAMC's in order to address the symptoms of their SCD's.

Treatment of Service-Connected Disabilities

When it comes to treating SCDV's SCD, the VAMC is limited to the use of conventional medicines and medical procedures, what I call traditional medications (TM), when combating the multitude of symptoms experienced by SCDV's. A review of the TMs that are most commonly

prescribed by VAMC healthcare providers for top-ten SCD's shows that many of these TM can cause adverse side effects.

Top Ten Service-Connected Disabilities and Medical Options

Tinnitus

When it comes to treating tinnitus and/or hearing loss, the top VA SCD options are extremely limited. In fact, there are no medications that are specifically designed to treat tinnitus or hearing loss. So, most clinicians utilize a combination of treatment options, including the use of psychotherapy and noise-masking techniques, in conjunction with medications (Henry, 2010; VA, 2013). Most often the VA prescribes medications for the other symptoms that are often associated with tinnitus or hearing loss, and these include anti-depressants, anti-anxiety, and sleep aids (Henry, 2010; VA, 2013). The symptoms associated with tinnitus and/or hearing loss (i.e., constant ringing or hissing sound in ears or head, with no external sounds present) can cause other symptoms that can affect the SCDV's daily life including increased frustration, anxiety, problems with sleep, as well as depression (Henry, 2010; VA, 2013).

Current research regarding the use of MC for the treatment of tinnitus is oftentimes conflicting (Bryant et al., 2018), while other research suggests inconclusive findings (Smith & Zheng, 2016). Some findings suggest that MC may exasperate tinnitus and hearing loss (Zheng, Reid, & Smith, 2015), whereas others have found that MC may protect against symptoms of tinnitus and hearing loss (Ghosh et al., 2018). Although these findings suggest a limited use of MC for the treatment of tinnitus and/or hearing loss, the use of MC has been shown affective in the treatment of the additional symptoms that can be associated with tinnitus (i.e. frustration, anxiety, problems with sleep, depression (Baron, 2018; Baron et al., 2018; Bonn-Miller et al., 2014; Hohmann et al., 2005; Mouhamed et al., 2018; Rácz et al., 2015; Woodhams et al., 2017).

Post-Traumatic Stress Disorder

In addition to being the second most prevalent SCD, post-traumatic stress disorder (PTSD) often presents with a multitude of symptoms. Because PTSD has so many different signs and symptoms, very few if any veterans present with the same types of symptoms, number of symptoms, or severity of symptoms, making PTSD a very individual disorder. Resnick and Rosenheck (2008) noted that the most common symptoms of PTSD that affected the veteran and their family were avoidance, foreshortened future, flashbacks, anger, and irritability. Jeffreys (2009) also commented that the Diagnostic and Statistical Manual of Mental Disorders (DSM–IV) listed PTSD into four core categories based on symptom clusters to include: intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity.

When it comes to the treatment of SCDV's who are diagnosed with PTSD, the VA recommends that practitioners use a combinative approach of TM in conjunction with individual, group, and family psychotherapies (Jeffreys, 2009). Recent research suggests that around 40% of the veteran's seeking treatment for PTSD were referred for a combination of TM and psychotherapies (Mott et al., 2014). There was a recent study conducted at the Michael E. DeBakey VA Medical Center with a group of veterans (n=388) from Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) who were referred for PTSD treatment. Mott, Barrera, Hernandez, Graham, and Teng (2014) noted that of that sample (n=388), 79% of the veterans were referred for medications, 39% of the veterans were referred for individual psychotherapy, and 24% were referred for group psychotherapy. In addition, 40% of the veterans within the sample were referred for a combination of medications and psychotherapies (Mott et al., 2014).

Additionally, a recent study found that when given a choice, SCDV's preferred psychotherapy to TM (Simiola et al., 2015). This may be related to the types of TM used by the VA to treat PTSD and the adverse side-effects that are often associated with them, leading many SCDV's to refer to TM as "one and numb". Simiola, Neilson, Thompson, and Cook (2015) noted that the most common types of TM used by the VA included: Selective serotonin reuptake inhibitors (SSRI's), anti-depressants, mood stabilizers, atypical antipsychotics, and beta blockers. It should be noted that the FDA only approves two SSRI's (i.e., sertraline (Zoloft) and paroxetine (Paxil)) for the treatment of PTSD, and all other TM are being used "off label" (Jeffreys, 2009). In addition, the VA recommends the use of these other TM to treat comorbid conditions that co-occurs with PTSD about half of the time (Jeffreys, 2009). For SCDV's who have tried, or do not wish to try TM, MC has been shown to be an effective treatment for PTSD (Greer et al., 2014) and for many of the co-occurring symptoms associated with PTSD including: sleep (Bonn-Miller et al., 2014), anxiety (Tambaro & Bortolato, 2012), and major depressive disorder (MDD (Fitzgibbon, Finn, & Roche, 2015)).

Chronic Pain and Inflammation

To treat SCDV's that fall within the chronic pain and inflammation cluster (i.e., limitation of flexion, knee; lumbosacral or cervical strain; paralysis of the sciatic nerve; limitation of motion of the ankle; degenerative arthritis of the spine), the VA utilizes a variety of methods. The VA approves long-term opioid use for the treatment of chronic pain and inflammation, but due to the current opioid epidemic, the VA is trying to utilize additional options for managing chronic pain and inflammation. Most often the VA recommends the stepwise approach (*Appendix C*) to manage chronic pain and inflammation (VA Clinician's Guide, 2017; VA research on Pain Management, 2018).

This approach is aimed at trying at keeping the SCDV on the lowest step of treatment that manages their current level of pain and inflammation, while allowing for a step up in treatment during times of acute pain and inflammation (VA Clinician's Guide, 2017). For SCDV's who wish to utilize MC to treat their chronic pain and inflammation, current research suggests that MC is an effective treatment (Baron, 2018; Baron et al., 2018; Ciccone, 2017; Degenhardt & Hall, 2008; Di Marzo, Bifulco, & Petrocellis, 2004; Fitzgibbon, Finn, & Roche, 2016; Friedberg, 2016; Hohmann et al., 2005; Mackie, 2006; Rácz et al., 2015; Report 3, 2009; Woodhams et al., 2017).

Migraines

For SCDV's who are formally diagnosed by the VA with migraines, the VA has been shown to provide quality care following high rate of VAMC guideline-adherents (Altalib et al., 2016; U.S. Department of Veterans Affairs, 2017). This care uses a TM that is specific to migraine treatment (e.g., sumatriptan (Imitrex)), but the SCDV must be formally diagnosed with migraines to receive this medication (Altalib et al., 2016; U.S. Department of Veterans Affairs, 2017). It should be noted that these same studies found that many migraine sufferers were misdiagnosed with general headache syndromes by their VAMC providers, leading to improper treatment options and the use of TM not aimed at migraines (Altalib et al., 2016; U.S. Department of Veterans Affairs, 2017). Many studies have found that MC is becoming an accepted treatment option for SCDV's suffering from migraines (Baron, 2018; Baron et al., 2018; Friedberg, 2016), and may provide more immediate relief when compared to TM in some SCDV's (Friedberg, 2016).

Scars

While many people might think that scars do not affect a SCDV's quality of life, current research suggests otherwise. The current knowledgebase regarding the effect of scars on SCDVs suggest there is a comorbidity of depression leading to lower psychosocial health outcome and concerns about appearance (Weaver et al., 2014; Ziolkowski et al., 2017). According to the American Academy of Dermatology Association, there are four types of scars, and each has a different treatment option, with injections and surgery being top options (AADA, https://www.aad.org/diseases/a-z/scars-treatment). While there is limited research regarding the use of MC on scars, a new study found that topical MC products aided in the reduction in scar pain and inflammation (Maida & Corban, 2017). Although these findings suggest a limited use of MC for the treatment of scars, the use of MC has been shown effective in the treatment of the additional symptoms that can be associated with scars (i.e., anxiety, depression, psychosocial functioning (Baron, 2018; Baron et al., 2018; Bonn-Miller et al., 2014; Hohmann et al., 2005; Mouhamed et al., 2018; Rácz et al., 2015; Woodhams et al., 2017)).

Effects of Service-Connected Disabilities on the Family

While many might think that only the SCDV is affected by their SCD, the truth is that their families suffer the burden as well. A recent study found that oftentimes the health of the SCDV was embedded in their familial relationships, and that the spouse played a critical role in the health of the veteran couple (Lewis et al., 2012). Additionally, their findings suggested that spouses should also be assessed for stress-induced symptoms such a PTSD, depression, and hypertension, all of which can be caused by secondary trauma (Lewis et al., 2012). Furthermore, each of the top-ten SCD's can affect the SCDV's spousal and familial relationships differently.

Tinnitus

The effects of tinnitus and/or hearing loss on the SCDV are well documented and can include symptoms such as mood swings, depression, anxiety, and sleep disturbance. The most obvious effects that tinnitus and/or hearing loss has on families is the SCDV's limited hearing and/or ringing in their ears. Goedhart, Vesala, and Harrison (2018) found that the two areas family relationships suffered the most were their social life and their relaxation. This limited the types of social activities the SCDV and their families participated in, such as visiting restaurants or attending other events where the background noise made it hard for the SCDV to participate in conversation (Goedhart, Vesala, & Harrison, 2018). Another difficulty that spouses reported was related to the SCDV's disturbed sleep patterns, and this was reported to cause tension in the relationship (Goedhart, Vesala, & Harrison, 2018). Another study reported that individuals reported having difficulties with communicating based on the severity of the level of their hearing loss (Dalton et al., 2003). In addition, patients reported having higher quality of life and less psychological distress when they had higher levels of acceptance of their tinnitus and/or hearing loss (Riedl et al., 2015). This is an important finding, because if the SCDV is experiencing less distress, there is a lower likelihood that their spouse will be affected by secondary trauma.

Post-Traumatic Stress Disorder

Spouses of SCDV's who are diagnosed with PTSD are at a higher risk of developing PTSD themselves, often caused by secondary trauma related to the SCDV's PTSD (Dekel et al., 2005). This study found that the lives of both the SCDV and their spouse often revolved around the SCDV's PTSD, leading to the spouse feeling a loss in their personal time and space (Dekel et al., 2005). Spouses reported that the boundaries between their lives and the SCDV's sometimes

became blurry, which was associated with their, and sometimes the whole family's development of anxiety and PTSD caused by secondary trauma (Dekel et al., 2005). Furthermore, recent research found that family support of the SCDV and their PTSD played a pivotal role in the healing process (Ray & Vanstone, 2009). Bolkan et al. (2013) reported that when the family was involved in the treatment of the SCDV's PTSD, the SCDV's reported better medication adherence and lower depression severity.

Chronic Pain and Inflammation

Multiple studies have linked chronic pain and chronic multisite pain to higher reported levels of depression and sleep disturbance (Emery, Wilson, & Kowal, 2014; Nicholl et al., 2014; Poole et al., 2009). In addition, Croxford and Yamamura (2005) found that *Cannabinoids* can modulate the function and secretion of cytokines from immune cells, thereby leading to a recommendation to utilize MC for the treatment of inflammation. Furthermore, Richardson et al. (2008) discovered that MC may be an important treatment for the pain and inflammation often associated with osteoarthritis.

It is also important to note that based on my created cluster for chronic pain and inflammation, 15.6% of all SCDV's fall within this category. Moreover, research suggests that spouses of SCDV's are affected by the secondary trauma that can come from living with the SCDV (Lewis et al., 2012). This spousal secondary trauma can be further exasperated by the increased depression and sleep disturbance that often accompanies the chronic pain and inflammation experienced by the SCDV's (Emery, Wilson, & Kowal, 2014; Nicholl et al., 2014; Poole et al., 2009).

Migraines

Recent research found that migraines not only effect the SCDV, but the entire family as well (Buse et al., 2018; Lipton et al., 2017; Seng et al., 2018). In addition, the causation of spousal and familial secondary trauma can lead the SCDV to experience feelings of guilt (Dekel et al., 2005; Goedhart, Vesala, & Harrison, 2018). Seng et al., (2018) discovered that the parent-child relationship was negatively affected by the parent's chronic migraines. In addition, Buse et al., (2018) study suggested that adolescent children were affected in a multitude of ways, such as loss of parental support or reverse caregiving and missed activities and events, by their parent's migraines. Again, children and spouses are affected by secondary trauma related to the SCDV's SCD (Lewis et al., 2012). Lastly, multiple studies have suggested that chronic migraine sufferers reported lower health-related quality of life, in addition to higher levels of anxiety and depression (Blumenfeld et al., 2010; Payne et al., 2011; Wang et al., 2012).

Scars

While scars themselves are not linked to creating negative effects on the family, the cooccurring symptoms that can accompany SCDV's with scars can. Most SCDV's had comorbidity
of depression leading to lower psychosocial health outcome and concerns about appearance
(Weaver et al., 2014; Ziolkowski et al., 2017). Again, it is the secondary trauma related to the
SCDV's scars comorbidities that effect the family (Lewis et al., 2012).

The Endocannabinoid System

In 1988, researchers at St. Louis University determined that the mammalian brain contained receptor sites named *Cannabinoid* receptors, and later CB1 receptors, which responded to compounds known as endocannabinoids, and now known as *Cannabinoids*, found in *Cannabis* (Lee, 2010; Woodhams et al., 2017). That research was expanded on in 1990 with

the discovery of the CB2 receptors located within the mammalian immune system (Lee, 2010; Woodhams et al., 2017). In 1992, researchers working in Israel were trying to discover the metabolic pathways of endocannabinoid when they instead located a signaling system within the body which regulates a wide range of biological functions (Lee, 2010; Woodhams et al., 2017). This system was named the endocannabinoid system (ECS), and as it turns out, this system in located in every mammal, humans included.

Cannabinoid Receptors

The CB1 receptors are located within the brain, whereas the CB2 receptors are located within the immune system, and each type of receptor has a different function (Mechoulam & Parker, 2013). The primary role of the CB1 is in the central nervous system and the brain and are believed to play a significant role in motivation and cognition (Mechoulam & Parker, 2013). In addition, the CB1 receptors have also been shown to reduce the affective and cognitive effects of pain, in addition to running parallel to opioid receptors (i.e., the opioid system) within the brain (Woodhams et al., 2017). This study also found that in states the recognize MC usage, opioid usage decreased, thereby showing the effect that MC can have on chronic pain (Woodhams et al., 2017). The role of the CB2 receptors is mainly involved with the immune system and have even been shown to play an important part in the general protective system (Mechoulam & Parker, 2013). This may be due in part to many of the different *Cannabinoids* found within the *Cannabis* plant.

Cannabinoids

Currently, researchers have isolated at least 113 different *Cannabinoids* within the *Cannabis* plant and have begun to better understand the five most abundant *Cannabinoids* and the effects they have on our body (Baron, 2018). In addition, researchers have also found a

number of different Terpenes, which are organic compounds and essential oils that create strong odors which are produced in a variety of plants other than *Cannabis* (Baron, 2018). Furthermore, researchers have identified about twenty different Flavonoids within the *Cannabis* plant, that act as antioxidants and protect against oxidative stress (Baron, 2018).

Tetrahydrocannabinol (THC)

THC is responsible for *Cannabis*' most well-known psychoactive effects to elevate mood and act as a painkiller, and cellular research has shown that it also is active in antioxidant activities (Baron, 2018; Cincinnato, 2018). In addition, researchers suggest that since the CB1 receptors run parallel to the opioid receptors, pain levels are decreased because these two systems use an overlapping signaling system in the body leading to a possible opioid sparing effect (1+1 does not = 2, instead 1+1=5 when MC & opioid medications are used in conjunction (Baron, 2018; Cincinnato, 2018)).

Cannabidiol (CBD)

CBD is the second most abundant *Cannabinoid* found within the *Cannabis* plant. It is non-psychoactive in nature and can lower or limit seizures, treat anxiety disorder, and reduce inflammation (Baron, 2018; Cincinnato, 2018). CBD also interacts with the CB1 receptors in the brain and will actually attach to the receptors prior to THC, thereby limiting the psychoactive effects of THC (Ciccone, 2017).

Cannabichromene (CBC)

CBC is non-psychoactive. It plays a key role in the anti-inflammatory and anti-viral effects and contributes to the overall analysesic effects of medical *Cannabis* (i.e., pain management (Cincinnato, 2018).

Cannabigerol (CBG)

CBG is non-psychoactive and is known to kill or slow bacterial growth, reduce inflammation, inhibit cell growth in tumor/cancer cells, and promote bone growth. It also acts as a low-affinity antagonist (i.e., pain management (Cincinnato, 2018).

Cannabinol (CBN)

CBN is mildly psychoactive, acting as a weak agonist at both the CB1 and CB2 receptors and has been shown to have analgesic properties (i.e., pain management), and promote sleep (Cincinnato, 2018).

Adverse Effects of MC Usage

While this study examines the positive benefits of MC, it must be noted that there are also adverse effects related to *Cannabis* that can affect individuals differently. Current findings support the use of MC for short-term symptom relief, but due to limited long-term medical trials, researchers were unable to make recommendations for long-term use (Degenhardt & Hall, 2008). This study also noted that the use of *Cannabis* has been approved for medical purposes, without evidence of its safety and efficacy (Degenhardt & Hall, 2008). In addition, researchers investigated dosing strategies and found that oral administration and vaporization of *Cannabis* extracts and oils were the preferred method over smoking *Cannabis* due to the carcinogens that are present in smoking a *Cannabis* cigarette (Khaiser et al., 2016).

Agrawal, Pergadia, and Lynskey (2008) found that of their sample who reported being past 12-month users (n=1,603), 43% of them experienced at least one *Cannabis* withdrawal symptom, with sleep disturbance, anxiety, and feeling depressed being reported most frequently (Agrawal et al., 2008). Other adverse effects of *Cannabis* may include, but are not limited to, dizziness, dry mouth, drowsiness, loss of coordination and balance, feelings of euphoria,

paranoia and anxiety, attention impairment, and short-term memory loss (American College of Physicians, 2008; Cincinnato, 2018).

Chapter 3 - Methods

Researchers define a paradigm as a widely accepted concept, such as when military members are honorably discharged, they will become veterans. Furthermore, a paradigm is also considered to be a person's frame of reference, thereby becoming their personal paradigm. This is extremely important when conducting qualitative research, especially when trying to understand the lived experiences of SCDV's and their families, because a person's paradigm influences how they view the world. This includes the meaning they assign to different events in their past and how these can affect their current constructed reality and truth. In the postmodern paradigm, the individual or family's perceptions are subject to both their objective and subjective reality, both of which influences their perceived truth. A key element is that for each SCDV and their family, there is no objective truth, only their subjective truth, and each SCDV and their family lives that truth. So, what does all of this mean?

This means that these SCDV's and their families create their realities based on the constructed meanings they assign to the events that have transpired in their lives. In addition, these families generate their assigned meanings of the experiences through which they have lived. All of these experiences and events affects the family's values and belief system, which may, or may not be in conflict with current larger social norms. These values and beliefs also influence how the family defines their reality and creates shared meaning of it, thereby illustrating the interconnections with how these families view and live within the world around them and the effect the world has on their subjective reality.

The Researcher

As with any research, the investigator's personal history can, and should, influence their explorations, but not to the point that they are not being subjective and open to what the data

suggests. Additionally, investigators should also be mindful of their personal "lenses" they use to view the world around them. In addition, the researcher should discus within the context of their study, relevant information about themselves that may identify them as an insider of any of the groups being studied. By doing this, the researcher hopes to make clear their motivations for conducting their present study and how these can influence their current research; this is known as being reflexive. In the following section, I will discuss my group status and why I was motivated to conduct this research.

I am fortunate enough to have served in the U.S. Navy where I was selected and trained as a Seabee. For anyone who is unfamiliar with the Seabees, they are the Navy's mobile construction battalions and are considered deployable forces that can be deployed anywhere in the world, on little to no notice. Seabees are considered to have a vastly different set of skills from that of ordinary combat-engineer units including, but not limited to having amphibious assaults units, underwater construction teams, Antarctic and extreme cold-weather duty, as well as having a long history of working hand in hand with special operations forces (SOF) operators and explosive ordnance disposal (EOD) technicians.

Unfortunately, after multiple failed joint surgeries, I was honorably discharged under medical conditions from the military. Prior to being discharged, I applied for and was enrolled into the VA healthcare system immediately upon my separation from service, thereby making me a SCDV literally overnight. Since my initial enrollment into the VA healthcare system, my original VA disability ratings have continued to increase, coinciding with a continued increase in the number of SCD's for which I am rated. I am currently rated as 90% disabled and have physical, learning, and mental disabilities. In addition, I am currently receiving treatment for five

of the top-ten SCD's at my local VAMC, as well as within my local community through TriWest.

For seventeen years following my enrollment into the VA healthcare system, I was prescribed a minimum of eight different TM, in addition to at least one, and sometimes two different types of opioid pain medications. Tragically, until recently (i.e., 2016), I was allotted extremely large doses of opioid pain medications daily for my SCD's. Thankfully, in 2016 I relocated to a state that recognizes the use of *Cannabis* as a medicine, and I began participating in my state's medical *Cannabis* program. Since I started utilizing MC, I have stopped all opioid use and am now only using three additional TM in addition to MC to assist with the management of my SCD's. I am also fortunate that I have private insurance through my wife's employment and am able to see a medical provider outside of the VA who could sign my state-required MC paperwork.

Regrettably, my MC use affected the level of care that I have received from the VA, and this has caused much undue stress in my and my family's lives. I lived on the state border, within twenty miles of New Mexico and Texas, and while I lived in New Mexico and visited the VA CBOC in New Mexico, the CBOC fell under the Amarillo Texas VA healthcare system. This created a conflict, because according to VAH directive 1315, veterans who live in states that recognize MC may participate in their state programs, but Texas does not recognize MC.

So, I was living in a medical *Cannabis* state but receiving care from a VAMC that was located in a state that did not recognize MC, thereby causing the VA medical provider to not recognize my claim of medical use of *Cannabis*. Instead, VA providers labeled me as "*Cannabis* Addicted" and asked me to sign a VA opioid contract, and thereby denied me medications to assist with pain management, because within the contract it stated that "I will not use illicit

drugs, including *Cannabis*" (*Appendix B*). This is one of the major pitfalls that many SCDV's fall into without knowing it, but it is in no way the only VA pitfall for SCDV's looking to utilize MC.

Participants

Prior to any recruitment, I secured approval from Kansas State University's Institutional Review Board (IRB) to conduct research with human subjects. After I received IRB approval, I began to recruit SCDV's and their spouses or partners for my study. In order to try and capture full, rich data, I utilized the following criteria for my participant sample. I utilized a simple questionnaire to assist me with participant recruitment, and any no or negative response excluded them from participating in my study (*Appendix A*).

In order to have been included in my study, participants must have been honorably separated from the military in order to be eligible to enroll into VA healthcare, and must have been considered a SCDV by the VA. They also had to have received treatment for at least one of the VA's top-ten SCD's, in addition to having utilized TM in the past for the treatment of their SCD, and who were now using MC in place of some TM. They must also have had a current spouse or partner who experienced the SCDV's change from TM to MC. Anyone who did not fit these criteria were excluded from this study.

Why This Population

Disabled veterans are oftentimes considered an at-risk population who are vulnerable. Frequently, veterans are untrusting of medical providers and do not fully disclose everything; this often stems from attitudes learned during military service (Kennedy, 2019). The truth is that most, if not all military members are known to call military psychologists "Wizards" or "The Wizard", mainly because military psychologists have the power to remove anyone from their

current duty station or from active military service (Kennedy, 2019). Much like the Wizard of Oz, military psychologists are perceived as having the power to make service members disappear, which is why so many military members call them "Wizards" or "The Wizard" because they have the power to send you home.

These attitudes and beliefs often follow military members as they transition into becoming a SCDV and can even have a major effect on their level of trust with VA healthcare providers, both medical and psychological, in addition to limiting discloser regarding their current health status and MC usage. This in turn can lead to misdiagnosed SCD, such is the case oftentimes with migraines (Altalib et al., 2016; U.S. Department of Veterans Affairs, 2017), or not being diagnosed at all due to the VA provider being unaware of all the symptoms the SCDV may be experiencing. Lastly, SCDV's may go undiagnosed or misdiagnosed due to the limited amount of face time that SCDV's actually have with their VA healthcare providers, because these visits are typically limited to 15- or 30-minute appointments and are usually scheduled for one SCD (Altalib et al., 2016; U.S. Department of Veterans Affairs, 2017). So, if the SCDV has more than one SCD, or is experiencing new symptoms, they may not have time to discuss these with their provider during their visit and may have to schedule another appointment, leading some to forgo treatment.

It is for these reasons that many researchers view SCDV's as an at-risk population who are at risk of being marginalized within the VA healthcare system. Being misdiagnosed or undiagnosed, to not having adequate amounts of time with their VA healthcare providers, can create stressful events that can negatively affect this population. Due to this, many SCVD's and their families are considered vulnerable because of the pitfalls with their current VA healthcare providers, as well as their personal perceptions about being marginalized and the meaning they

attach to that. All of which can affect the SCDV and their family's quality of life. This is why this population is so important to study, so that future researchers have a better understanding of SCDV's personal perceptions regarding their VA healthcare and how these perceptions can affect their family too.

Recruitment

For the initial contact and recruitment of participants for my study, I made contact within the Santa Fe VA CBOC, with one of the behavioral health providers. This contact confided in me that they had several SCDV's, who were utilizing MC and who might be interested in participating in my study. This contact also allowed me to leave my study's abstract and my contact information, so interested SCDV's could contact me if they wanted more information about my study, or if they decide to participate in the study. This was a passive source of recruitment, and I had hoped that I could snowball recruit other participants from anyone that contacted me from this source. In order to take a more active role in recruitment, I also made managerial-level contacts at two different medical dispensary groups located within the greater Santa Fe and Albuquerque metro areas. To help facilitate meeting as many SCDV's as I could, I planned to set up my recruitment table on Fridays, usually the busiest day of the week according to my dispensary contacts. This would have allowed me to setup a recruitment table within the dispensary and greet patrons as they entered the establishment. I was planning to only conduct recruitment at one dispensary a week, and going to different dispensary locations weekly, until I had recruited five SCDV's and their spouses/partners (n=10).

The initial introduction to myself and my study was to be scripted and would have contained the participant questionnaire, so that I only provided recruitment information to eligible persons. The following was going to be my introduction script.

"Hello, my name is Mark Landess, and I am a Ph.D. candidate at Kansas State

University, and I am collecting data for my dissertation. I am a service-connected disabled

veteran who currently lives in New Mexico and participates in the MC program. My research is

looking at the differences between traditional medications (TM) and medical Cannabis (MC)

when it comes to combating symptoms associated with the top-ten VA service-connected

disabilities. I am extremely interested in talking to veterans who utilize MC. May I ask if you are

a veteran, or do you know any veterans who would be willing to sit down and talk with me? I do

not wish to discuss the service-connected disabilities themselves, but the changes in quality of

life that might be associated with changing medications. If you, or the veteran you know, would

be willing to hear more about my study, or to participate in it, please contact me. Thank you for

your time and help."

After reading my script, anyone who said they were interested or knew someone who was, I would have provided them with a copy of my abstract so they would have a brief overview of my study, as well as my contact information. I was not expecting anyone to sit down and talk during the initial contact, but I was willing to answer any questions that anyone might have had about the study. Instead, this was supposed to be about meeting, greeting, and contacting as many veterans and people who knew veterans as I could, in hopes of finding my participants.

Once I handed-out my contact information, I had to wait until someone contacted me, then I was planning to email them the criteria questionnaire to make sure that they fit my study. If they fit the criteria, I would have proceeded with trying to recruit them and their spouse/partner for my study. I was planning to utilize focus groups and would have setup two separate groups, one for the SCDV's and one for their spouses/partners.

Adjustments

Unfortunately, my entire recruitment plan had to be altered and resubmitted for IRB approval due to the COVID-19 pandemic and Kansas State University's new regulations regarding research with human subjects during the crisis. To begin with, my method of recruitment changed from face-to-face, to mainly online. I was able to drop-off recruitment slips (*Appendix D*) at each of the medical dispensaries within the Santa Fe area, so they could be put into customers bags as a passive form of recruitment. I also placed ads in local area newspapers, hoping to reach a wider pool to recruit from. Additionally, I also created a digital recruitment ad (*Appendix E*) for Facebook, so I could take a more active role in the recruitment process.

I joined as many veteran groups as I could, and by posting my recruitment ad twice a week, I was able to recruit four SCDV spouse/partner pairs (n=8). Originally, I had planned to recruit five pairs (n=10), but due to time constraints and a tapering off of inquiries regarding my study, I had to move forward with the four pairs I had already recruited. I continued to actively recruit while I conducted interviews in hopes of finding a fifth pair but was unsuccessful and had to move forward with my study.

Because each of my recruited SCDV spouse/partner pairs lived in different states and were available at different times, I had to conduct individual interviews instead of holding focus groups.

Research Design

For this study, I decided to employ qualitative research methods, which are well suited for this inquiry because it allowed participants to use their voice and provide detailed insight into the lived experience of being a SCDV, or their spouse/partner, and their experiences with TM and MC. In addition, this method often relies on open-ended questions to fully allow the participants to recount the meaning they have assigned to their experiences and how these

experiences have shaped their constructed reality, leading to rich descriptive data. Additionally, this research method allowed for unscripted follow-up questions, which enabled the researcher to further explore ideas and concepts that SCDV's and their spouses/partners brought up, allowing the researcher to construct a clearer picture of the phenomena, again leading to fuller, richer data.

In order to collect full, rich data, this study relied on qualitative research methods that were to be employed in a focus group setting. This would have enabled me to conduct separate focus groups, with SCDV's in one group and their spouses/partners in another group, thereby allowing me to collect data from five different voices at one time without spousal/partner influence. This is often considered a benefit of focus groups, because it allows the researcher to collect data from multiple points of view at one time, leading to consistent themes within the data. Group settings are also considered one of the biggest drawbacks of focus groups, because some individuals may agree with others within the group, even if they never experienced the event, causing misleading findings within the data.

Beyond this, focus groups provide researchers with the ability to gather rich data about the lived experiences of SCDV's and their families and the stressors that are common among this population. For these reasons, I was going to conduct two separate focus groups for this study, in anticipation of collecting rich, full data that expanded our current knowledge based regarding limitations to MC access for SCDV's.

Focus Groups

I was planning to use focus groups for this study. This would have enabled me to have two separate focus groups with the SCDV's separate from their spouses/partners, so that both groups would feel comfortable speaking about "their" experiences without spousal/partner influence. I had booked an event room to hold my focus groups in, but because of the changes to

my original research design, this was no longer needed. The event room was to be funded in part by funds from the Kappa Omicron Nu Hettie M. Anthony Fellowship for doctoral research. In addition, I was going to offer participants an incentive to partake in my study, and this was to include a gift voucher to the store of their choosing. Funds for participant incentive would have been funded in part by funds from the Kappa Omicron Nu Hettie M. Anthony Fellowship for doctoral research. Because of the changes to my research design, I utilized the funds for recruitment slips and ads that ran in local area newspapers.

Prior to the focus group meetings, I planned to send each participant a demographic questionnaire (to include their chosen pseudonym), so I could collect this data without losing focus group time (*Appendix C*). I also prepared the focus group rules, so everyone understood the expected focus group conduct. I also needed to print two copies of my consent form for everyone's signature, so both parties (i.e., researcher and participant) would have a signed copy. I was also going to provide copies of my IRB approval and abstract, should any of the participants wish a copy. In addition, I would have prepared "Hello, my name is" stickers, with each participant's pseudonym on it. This way, when I reviewed the video recordings of the focus groups, I would be able to identify who said what for my qualitative quotes. I also needed to make sure I had everything I needed and take it with me, including a backup audio recording device that I would have used later for computer transcription.

Once I arrived at the focus group location, I was going to look around to find the best setup for my focus group. I also needed to make sure I had something for them to sign their paperwork on. Additionally, based on if the room contained a conference table or just chairs, I needed to rearrange seating, so everyone had line-of-sight with one another. Once the area was

setup and I was ready to proceed with the focus group, I would have then asked each participant to sign their consent to participate agreement, after I read the following script:

"Hello again. Allow me to reintroduce myself, I am Mark Landess, and I am a doctoral candidate at Kansas State University. I am currently gathering data about service-connected disabled veterans who utilize medical Cannabis in their treatment of service-connected disabilities. You have agreed to participate in my study with full knowledge that you may leave the study for any reason at any time without fear of retribution or retaliation. I am handing each of you a copy of the consent to participate agreement. Please read along with me and then sign and date it if you understand and are willing to participate."."

After they signed their copy, I would have collected them, and then I would have provided them with another copy that I signed for them to take home. I was then going to explain that in order to protect each other's identity outside of the focus group, what is said in the group needed to stay within the group. I would also have reminded them that all identifying markers would be removed from the data and final write-up. Finally, I was going to explain that once I had created my final document with my findings, I was going to ask them to review it to ensure I did not write anything they do not wish printed, as well as to making sure I captured their voice and their lived experiences (i.e., member checking).

Interview Strategy

Again, due to the COVID-19 pandemic and Kansas State University's new regulations regarding research with human subjects during the crisis, I had to change my original research design from focus groups to individual interviews. This still allowed me to collect full, rich data regarding the lived experiences and constructed realities that SCDV's and their families experience each day, creating a clearer picture of the phenomena being studied.

One of the main strengths of individual interviews is the ability to spend more time with each participant, thereby allowing for a deeper inquire. Additionally, individual interviews allow the investigator to gather a fuller picture of the phenomena under investigation by eliminating the risk of group agreement. Another advantage of utilizing individual interviews was my ability to schedule with each participant without trying to find a day and time that all of them were available. Unfortunately, one of the biggest limitations of individual interviews is the amount of time that is required to conduct each interview, transcribe, and analyze. This is why my original research design planned to use focus groups in order to reduce the amount of time required to conduct my study.

As before, due to the changes that were put in place during the crisis, I had to change my original research design from focus groups to individual interviews. By doing this, I was able to again save time by sending each of my participants a copy of the informed consent electronically, and they were then able to read, sign and return the form via email. After receiving each participant's informed consent form, I was then able to schedule a day and time for each of the individual interviews.

In order to conduct the interviews, I created a Zoom meeting room so I could utilize video during the interviews, providing a face-to-face feel. Additionally, this allowed me to notice any facial expressions or changes in body language during the interview, which was noted at the time. I was still able to have member checking by sending all of the participants a copy of my final analysis electronically. This allowed them to review my findings and make known any comments or concerns they might have had prior to publication of my final document.

Measures

Prior to conducting my interviews, I created a list of open-ended questions that I used for each individual interview in order to explore the same concepts with each participant. These questions were designed to extract the lived experiences of being a SCDV, or their spouse/partner, and how these experiences had shaped their current values and beliefs regarding the use of MC. In addition, these questions were structured to examine how these families cocreate meanings and subjective truths related to limited access for SCDV's to MC as a healthcare option.

I created two different sets of interview questions, both were almost identical, with one being for the SCDV (Appendix F) and one for the spouse/partner (Appendix G). The following are some of the questions I asked during my interviews.

- Please describe some of the negative effects caused by the traditional medications prescribed by the VA?
 - a. To what extent did these affect other family members?
- 2. Please describe some of the positive effects caused by the traditional medications prescribed by the VA?
 - a. To what extent did these affect other family members?
- 3. What were some of the key reasons that caused you to explore medical *Cannabis* as a treatment option?
- 4. To what extent did you involve or discuss your decision to utilize medical *Cannabis* as a treatment option with anyone in your household?
 - a. Why or why not?

- 5. To what extent did you involve or discuss your decision to utilize medical *Cannabis* as a treatment option with anyone on your VA medical team?
 - a. Why or why not?
- 6. Please describe some of the negative effects caused by the use of medical Cannabis?
 - a. To what extent did these effect other family members?
- 7. Please describe some of the positive effects caused by the use of medical *Cannabis*?
 - a. To what extent did these effect other family members?

Participant Protection

In order to gather rich, full data, I had to ensure my participants that their identity, and the data they provided, would be protected. First, to protect my study's participants, I asked each of them to create a pseudonym, and from that point on in the research I only referred to them by their chosen pseudonym. This allowed me to use direct quotes in my findings without risking that any of my participants might be identified. In order to protect the audio data that was collected during the individual interviews, it was stored on my computer and was password protected. All raw and compiled data that was gleaned from each interview was also secured on my computer. Lastly, all transcripts and final documents were secured on my computer, thereby limiting access to only those researchers involved in this study.

Software Utilized

This study was to utilize different computer software programs to assist the researchers with transcription and analysis of the interviews. Unfortunately, due to software issues that could not be resolved with technical assistance, no analysis specific software was utilized for this study. Instead, I utilized the audio recording and transcription feature offered by Zoom to create rough transcripts. Additionally, I also recorded the audio on another recording device to ensure

that I was able to capture everything said during the interviews. I then listened to the audio recordings while transforming the rough transcripts into my final verbatim transcripts, which were then shared through a secured online drop box with co-researchers.

Analysis

Once the individual interviews were transcribed verbatim, each researcher was able to read through the transcripts and begin to locate categories and themes within the data. This was crucial, because this led to analyzer agreement, where each researcher was able to locate the categories and themes within the data. In order to have consistency within the findings, the analyzers not only had to locate the recurring categories and themes, but there also had to be agreement among the analyzers about the categories and themes and what meaning was assigned to each. This helped to strengthen this study, because once I had agreement among all analyzers, I was able to move forward with member checking.

Member checking is an important part of qualitative research because this ensures that what is written within the final document accurately reflects their story. This is extremely important because without member checking, the researcher could create conclusions that are unsupported because they did not fully tell the SCDV's and their family's story, which was the foundation of this study. It is all about the lived experience of being a SCDV, or their spouse/partner, and how current VA policies create stressor events which limit their access to MC. Again, this was the primary focus of this study, to understand the subjective realities that SCDV's and their families construct in order to live their truth.

Chapter 4 - Findings

The primary focus of this study was to explore the lived experiences of Service-Connected Disabled Veterans (SCDV) and their families when navigating federal and Veterans Affairs (VA) policies that are in conflict with state policies regarding the use of medical *Cannabis* (MC) in lieu of traditional medications (TM). In order to gather rich data regarding this population, this research utilized individual interviews that were guided by a set of open-ended questions, which were asked to each of the participants. The raw data were then individually coded by each of the co-investigators to locate recurring themes and sub-themes within the data. The investigators then discussed their findings in order to create analyzer agreement regarding the final themes and sub-themes found within the data. The following sections discuss each aspect of the research in deeper detail in order to present the findings.

Research Questions

The primary purpose of this study was to conduct a qualitative investigation examining the complex relationship between the uses of traditional medications (TM) and medical *Cannabis* (MC) in treating veterans who are suffering from one or more of the top-ten service-connected disabilities (SCD). Through this investigation, I examined how each of the different types of medications affected the overall quality of life for veterans and their families, specifically those who are currently diagnosed with one or more of the top-ten SCD's. Additionally, this study looked to gain deeper understanding of the experience of SCDV's in navigating national and state policies currently affecting what medication options are legally available to veterans.

This study looked to answer the questions, "What effect does MC have on SCDV's individually and on the family, functioning from a human development and family science

perspective?". Research also examined how parents talk and communicate with their children, not only about the veterans' illnesses, but about them starting a cannabinoid regiment that could help increase both their physical and emotional wellbeing. This study planned to begin looking at some of these complex family relationships and how the use of MC by a SCDV parent currently suffering from a SCD effects those relationships, not only between veteran and spouse, but also between parent and child.

All members of the family system are directly affected by the health struggles of another member of the family; often, this is more common if the sick family member is a parent. These effects on the family can be made worse when the issue is compounded by not one, but two or more SCD's (mental and/or physical) that the veteran may be experiencing simultaneously (V.A. Compensation Data, 2018).

Sample

This study was aimed at SCDV's who utilized MC in place of some or all of their TM when treating their SCD. Unfortunately, because of the COVID-19 pandemic, this study focused recruitment efforts on social media sites frequented by SCDV's. Facebook was the primary site used for recruitment, with the primary researcher joining as many veteran groups as I could. Then each day I would post a recruitment ad on each veteran group's Facebook page. I was fortunate enough that several veterans reposted my recruitment ad to their personal pages, leading to other recruitment opportunities. Besides Facebook, I also posted ads in local area newspapers and sales papers, trying to find local area participants.

Once I was contacted by someone seeking more information regarding my study, I would forward on my sample questionnaire to find if they met the participant criteria. If they did meet the criteria, I then sent them all of the spouse/partner questionnaires and consent forms to be

signed and returned to me. Originally, I was planning on recruiting five couples, but due to time constraints I had to move forward with data collection after recruiting only four couples. I continued to try to recruit additional couples while I collected data but was unsuccessful.

For the final research, four couples were recruited, providing eight participants (n=8) for the study. My sample consisted of three couples that were married, and one couple that was living in a long-term partnership. All of the SCDV's were males, and the spouses and the partner were all female. Additionally, all of the couples resided in states that recognize the use of MC and participated in their state programs. Three of the couples lived in states that also legalized the recreational use of *Cannabis*, impacting their ability to grow *Cannabis*. In addition, all of the participants within this study self-recognized as White. Furthermore, two of the SCDV's were pre-9/11 era veterans with the other two being post-9/11 era veterans, as well as three of the SCDVs having served in the U.S. Army and one of the SCDV's having served in the U.S. Navy.

My sample also contained a broad range of SCDV's who each were being treated for different SCD's. One of the participants was receiving treatment for "Gulf War Syndrome,"," another was being treated for PTSD, another for chronic pain and inflammation, and the last for a multitude of illnesses including chronic pain and inflammation, as well as cancer. This allowed the study to examine SCDV's who were being treated for different top-ten SCD's and who were using MC in place of different TM, allowing for a broader scope of understanding.

Data Collection

Data were collected from participants using questionnaires and individual interviews.

Prior to conducting the individual interviews, each participant was sent a questionnaire to collect their demographical data. This data were collected before the interviews in order to reduce the amount of time spent on each interview. By doing this, I was able to collect all the demographic

data from each participant, so that we could focus the interview time on the standardized interview questions examining the lived experiences of these families. This also allowed me to ask any follow up questions that I had regarding their demographical data to make sure that I had all of the information needed for this study.

Each participant was interviewed independently while being asked the same standardized open-ended questions. In addition, each interview was recorded to assist later with transcription. Additionally, each interview lasted between 35 and 45 minutes, and after each interview ended, it was transcribed verbatim to make sure nothing was forgotten or missed. Once each interview was transcribed, it was uploaded to a secure online drop-box in order to protect the data, as well as allow the co-researcher access to the documents. Furthermore, the audio recordings were also uploaded, as well as the unedited versions of the individual transcripts and the demographic questionnaires, so that the co-researcher could access any research materials that were needed.

Data and Analysis

Following this study's focus of exploring the lived experiences of SCDV's and their families, each of the individual interviews were transcribed verbatim into raw data. The raw data were then read and reread before coding started. By doing this, I was able to better understand what each participant said in their interviews, thereby aiding my coding efforts. I then started looking for recurring themes both within and between interviews and began to compile a list of themes found in the raw data. These themes soon created a clearer picture of multiple sub-themes that emerged from the data, adding a deeper understanding of the multitude of experiences that these families faced on a daily basis.

In order to reach analyzer agreement regarding the data and findings, each of the coresearchers examined and analyzed the data independently. Once both of the co-researchers had compiled a list of categories, themes, and sub-themes, we came together to discuss our findings. This allowed for discussion about and the merging of different categories, themes, and sub-themes, to create a set of agreed upon themes and sub-themes that encompassed all the research findings.

Analysis of Findings

After the raw data were analyzed, the co-investigators came to agreement regarding the themes and sub-themes that emerged from the data, and the following findings were uncovered during this exploration. First, there were five main themes and fifteen sub-themes that the co-investigators agreed upon (Table 3). Second, each theme categorizes different sub-themes that fit under the overarching theme, with each building on the others (Table 3). Lastly, all of the themes and sub-themes impacted the SCDV and their family in different ways, and each family's outcomes were based on their personal experiences regarding the use of MC by the SCDV.

First, every SCDV had different factors that led to their initiation to utilize MC in place of TM. This theme had four sub-themes that fell under the overarching theme of factors to initiate, including internal factors, relational factors, systematic factors, and ability to choose healthcare. Each of the participating dyads experienced their own individual factors for the SCDV to initiate the use of MC, but each couple was impacted by their own factor leading to initiation.

Next, every SCDV or other members of their immediate family felt stigmas, regardless of what medical option the SCDV decided to adopt as part of their healthcare regiment. This includes stigmas aimed at the current and ongoing opioid crisis, not only within the VA but all healthcare facilities and providers across America, as well as stigmas about the use of MC.

Third, every SCDV and their family felt family effects that were experienced with the use of MC, that TMs did not provide. All the families within my study experienced better quality of family time, better family dynamics, better engagement with the outside world for the SCDV, and expanded mental capacity. Any one of these by themselves would help improve outcomes for most families, but when taken all together, the impact on family health is clear.

Fourth, every SCDV experienced differences not only in their health but also in their healthcare management, ranging from pain and mental health management to healthcare trade-offs that each participant had to make in order to utilize MC, where only some of the differences experienced by each participant. In addition, some of the participants also had adverse effects to MC, mainly with unknown strains that the SCDV was new to. Additionally, depending on what state each participant lived in, there were different rules regarding the use and production of MC.

Lastly, most participants and their spouses/partners experienced hope for the future. This was a finding that has implications for other veterans and their families. Having a positive outlook on life impacts all other areas of life, including physical and mental health, as well as overall family health. Each theme and sub-theme will be discussed in order to expand on each of them, as well as provide information linking participants' data to the summary of findings. The following is a summary of the themes and sub-themes that emerged from the data during this research study.

Table 3. Analysis of Findings Themes and Sub-Themes

Category	Name
Theme	Factors to Initiate
Sub-Theme	Internal Factors
Sub-Theme	Relational Factors
Sub-Theme	Systemic Factors
Sub-Theme	Ability to Choose Healthcare

Theme Medication Stigmas

Sub-Theme Opioid Stigma
Sub-Theme Cannabis Stigma
Theme Family Effects

Sub-Theme Quality of Family Time

Sub-Theme Family Dynamics

Sub-Theme Engagement with Outside World

Sub-Theme Expanded Mental Capacity

Theme Health and Healthcare Management

Sub-Theme Pain Management

Sub-Theme Mental Health Management

Sub-Theme Trade-Offs for Health Calculator

Sub-Theme Adverse Effects of Medical Cannabis

Sub-Theme Implications for Living in Different States

Theme Hope for the Future

Sub-Theme Finding Their Purpose Again

Factors to Initiate

Prior to any of the veterans in this study utilizing MC, they each went through different factors that lead to their initiation of use of MC. Additionally, while each of the SCDV's had different experiences leading to their initiation, at the same time they each shared similar experiences. When it came to the SCDV initiation of use of MC, they each went through the same factors to initiate, but each experienced it based on their and their spouse's/partner's lived experiences. In addition, each family experienced different levels of stress during the initiation process based on the family's current level of functioning. This level of functioning influenced the family's outcome when dealing with stress.

While each of the participants had individual experiences that impacted their decision to initiate the use of MC, many of these experiences shared similar elements that fit together into

one of the four sub-themes. In addition, each of the four sub-themes affected the participants decision to start using MC, thereby impacting the SCDV's and their spouse's/partner's choice to utilize MC to treat one or more SCD. When it came to the factors to initiate the use of MC by the SCDV, there were four sub-themes that had the biggest impact on deciding to utilize MC, or not, to treat a SCD. These were internal factors, relational factors, systemic factors, and the ability to choose healthcare. The following sections examine each of these sub-themes in depth.

Internal Factors to Initiate

Each of the SCDV's and their spouse/partner in this study experienced internal factors to initiate the use of MC by the SCDV for the treatment of one or more of their SCD's. These factors are considered internal because each of the participants experienced their event in an internal context, which was individual to each participant. But each of these individual events shared the experience of being internal to each participant, as well as leading to the SCDV beginning the use of MC in place of TM.

In addition, these events were categorized as being internal factors to initiate because each SCDV's and/or their spouse's/partner's feelings, beliefs, attitudes, and values regarding the use of MC and TM were being influenced unconsciously by current social norms and VA policies, as well as by VA providers' attitudes regarding the use of MC by SCDV's.

Additionally, each SCDV's and/or their spouse's/partner's decision to initiate the use of MC by the SCDV was also internally influenced by factors out of their control, including geographical location, doctors walking out of exams, abuse of TM, and not being prescribed the correct types or amounts of TM to treat one or more SCD.

She Walked Out on Me

Popeye, a 48-year-old White male who is a pre-9/11 Gulf War-era SCDV who lives in Colorado and suffers multiple SCD's ranging from having had back surgery to having gastrointestinal issues that led to having part of his colon removed. Popeye experienced the internal factor of his VA primary care provider (PCP) not listening to him in regard to his decisions to explore MC as an option to treat his SCD in place of pain medications. This event eventually led to his VA provider walking out of his exam because of her attitude toward MC and his attitude toward her for not being willing to discuss MC. This also caused Popeye to quit using the VA as his primary medical provider and instead use private health insurance for about two years. He has now returned to using the VA as his primary medical provider, and his new VA PCP is accepting of his MC usage and follows the VA directive regarding SCDV's living in states that allows the use of MC and has not taken a negative stance on his MC usage.

Popeye explained his situation as:

"Yeah (laughs), yeah. And like I said, Man, I switched up, ugh, when I was trying for benefits at a primary care providers with my Gulf War syndrome stuff, that really didn't believe in it, and ugh, we got into some words, and I told her a few words one day, she was really reeled back and I told her that she could go, stick it straight you know where, and she walked out on me and I quit using the VA for two years. Umm, using private practitioners is kind of who helped me get my claims pushed through the VA. And they have backed all my choices to use cannabis and get off the pain meds. Umm, no because I just said I switched primary care because the one here was so lousy that I quit using her, and the one that I have now in Colorado Springs, umm, I've told her what I'm doing, and she hasn't said anything negative to it (Popeye)

Popeye's spouse, Olive, who is a 46-year-old White female, also noted that they lived in a rural area and the VA Community Based Outpatient Clinic (CBOC) in their area was small and only had one provider, who was also the VA provider that walked out on Popeye. In order to overcome the negative attitude of the VA PCP about MC, Popeye started to use private health insurance and found a medical provider who helped him with his VA claims, as well as supported him in his choice to use MC instead of narcotic pain medications. Unfortunately, Popeye's new PCP passed away, leaving him without a PCP and eventually leading him back to the VA for his health care. In order to have access to better healthcare through the VA, Popeye now travels to the Colorado Springs VAMC where he has more options to choose a VA PCP.

Olive stated that:

"Yeah, well, where we are, it's very small town, and the VA doctor here walked out on him at one point (laughs). So (laughs), and just, if it's not in my book I can diagnose you and help you and just walked out on the appointment. Umm, and I know it, it's been hard to get into the VA, ugh, just to get appointments. We were having to travel quite a bit. And he's had a lot of issues. He's had back surgery. He's had part of his colon removed, tons of different issues, medical issues though. It's kind of hard, we've been getting back into seeing more of the VA system now because our primary doctor passed away and, it's such a small town where we're at. We don't have really good doctors, we are with one of, we stayed with one of his nurse practitioners, but umm, I don't think she's as good as he was, our primary care doctor. So, we've been utilizing more of the VA, umm, he's traveled to a bigger town, to the, VA, he switched from our small town to the bigger town, to go to the VA and I think it's been a better, positive for him (Olive)

By having his original VA PCP who he was seeing at the local VA CBOC walk out on him and being unwilling to discuss his wishes to try MC, Popeye decided to quit using the VA and instead use private healthcare. These experiences help to illustrate how difficult it can be for SCDV's living in a state that recognizes the use of MC to begin using MC to treat one or more of their SCD's, while their civilian counterparts do not have these barriers. In addition, most if not all civilians can have their PCP sign state-required MC paperwork, while SCDV's cannot go this route and instead have to find a non-VA provider to sign their paperwork so they can begin using MC. This too can cause barriers, because some states that recognize the use of MC requires the patient to have an established relationship with their PCP in order for the PCP to be able to sign the paperwork. Furthermore, when SCDV's are ineligible for insurance through the affordable healthcare marketplace, and unless they have private insurance through either their or their spouse's/partner's workplace, they are oftentimes forced to use the VA as their only healthcare option. Because of these barriers, it can be exceedingly difficult for SCDV's who wish to utilize MC to be able to begin without having to find a PCP outside of the VA who is willing and able to sign their MC paperwork.

They Exacerbated a Lot of My Anxiety and Depression

Another of the participants is a 30-year-old White male who is a post-9/11 SCDV named Stanley, who lives in Michigan and suffers from both mental and psychological issues related to his service. Stanley stated that while using TM antidepressants that were prescribed by the VA, he did feel some short-term acute relief, but the long-term side effects soon outweighed the relief he received from the medication. In addition, the TM also started to increase other issues related to mental and psychological health, including anxiety, fatigue, and depression. Additionally,

Stanley also stated that the TM made it extremely hard to get going in the morning, as well as caused physical side effects when he quit using the TM.

Stanley explained his experiences as:

"Man, very negative across the board. I'm trying to think of what it was like to take that medicine. Umm, just a general level of anxiety all the time. Umm fatigue. Umm, almost depression-like symptoms in that I don't have a desire to do much of anything, I'm not, you know, say you take your first couple sips of coffee in the morning, you kind of become a little energized. Umm, I would describe it as exactly opposite of that. Umm, uhh, sick, headaches, umm, almost like brain shocks in a way. Umm, the brain shocks didn't occur until I started ceasing taking the medication. So, umm once I started kind of weaning myself off of it over a period of a couple of weeks, month, umm I would have like brain zaps...So, I'm thinking I'm going to be taking a medicine that's going to help my health. And it kind of like almost exacerbated a lot of my anxiety and depression symptoms (Stanley)

Mae, a 30-year-old White female who is married to Stanley, also noticed the differences in Stanley caused by the TM prescribed to him immediately after his discharge when he became a SCDV. Mae not only noticed the increased levels of anxiety in Stanley, but also mood swings and having the shakes. Mae also noted that the VA started to try a lot of different medications that she felt did not help and even caused more issues within their relationship, something I will discuss in the next section. Furthermore, Mae noticed how much additional stress was being caused to Stanley by him seeking help but not getting the results for which, they had hope. When Stanley decided to quit using TM, Mae also witnessed the physical side effects that followed.

Mae had the following to say about her experiences:

"Yes. Umm, so some of the negative side effects that I witnessed were; it was supposed to help with a certain problem, umm, and it created, it almost amplified his other problems. So, uh, sometimes mood swings. Umm, I feel like he couldn't stop shaking. Umm, anxiety was amplified...Umm, those were like amplifying almost, the things that, like I said the things I thought they were going to help him... the unpredictableness, and then I just feel like the medicine, they were just almost throwing different medicines at him, and not even, really seeing if like, following up, like is it working well with you. Umm, and making those come to light and not even really helping with the problem that it was supposed to. It created a lot of tension. I was proud of him that he took the action to go get help. I will say that, umm, but, you know, it wasn't solving the problem, and so, it was causing stress to him because he wasn't liking the way he was feeling, umm, but we knew he needed something, some sort of medication... it was a stressor, umm, trying to figure it out because he needed something, was, umm, what we decided on. I think through, through everything, and he a lot of times took initiative of like, I'm going to stop this medication, which then had its side effects. Umm, which caused more tension and arguments (laughs)... just stressful for everyone (Mae)

They Didn't Prescribe Enough

Mary, a 49-year-old White female who lives in Florida, is in a committed partnership with Junior, a 66-year-old White male who is a pre-9/11 SCDV. Junior suffers multiple SCD's including chronic pain, in addition to recently having a bone marrow transplant, as well as being in remission from prostate cancer. Mary noticed a drastic increase in the amount of pain that Junior was experiencing, especially after the VA eliminated all of his opioid pain medication. Mary said the VA then started prescribing Junior Tramadol but removed it after asking him to sign a medication agreement. After signing the agreement, the VA conducted a drug test on

Junior and said that he broke his agreement by testing positive for MC. Mary also stated that the VA then tried multiple types of non-pain specific medications, and recently even these have failed to bring Junior relief. Mary also noticed that Junior has issues at night with not being able to sleep, mainly because of the amount of pain he is in at night.

Mary explained what she witnessed by say:

"Umm, they didn't prescribe enough (laughs). Well, like umm, when he was on the medications for after the transplant his, umm, medical, his pain level was at a different level where he could tolerate it. Umm, when they took away all the higher medications, because they supposedly, ugh, he was cured of the cancer. Umm, then you know his pain level, just shot up, astronomically, and then little by little, they started taking away the Tramadol, because they have to sign this umm, consent that they agree not to use, any medical cannabis or, ugh, ugh, the VA doesn't look at it as medical cannabis, because the government doesn't see it as umm, umm, a medication, you know, it's still not okay through the VA and all that. So, because of the medical cannabis, little by little, they were, getting rid of his Tramadol, and then, they tried him with, umm, the Gabapentin didn't work. So, they went to the Lyrica, and then they just got rid of the Tramadol, and it's like you, you know, the man needs something for his pain. Ugh, that he kept telling them that the pain level was, so high that, you know he couldn't even rest at night. Umm, so, you know, it got to the point where, he was using more medical marijuana to try to ease the, the side effects of not getting the medication... when he stirs or when he goes out, umm, to try to get to the point where you can come back to sleep. Umm, it's just, it's annoying to know that he's out there and I'm in here (laughs). You know, we're just, umm, we just want him to be *comfortable* (Mary)

These experiences are common to many SCDV's who decide to use MC when also being prescribed TM through the VA. They are asked to sign an agreement that says the veteran will not use "street" drugs, including MC, oftentimes knowing the veteran is using MC and will fail the drug screening, thereby breaking their signed agreement. By breaking their agreement, SCDV's are denied a wide range of TM, including pain medications. Unfortunately, these actions go against the VA house directive that is supposed to protect SCDV's who are living in medical *Cannabis* states. In addition, the medical research suggests that individuals who use MC also use opioid pain medication less often than their non-MC using counterparts because of how *Cannabis* acts within the brain, opening the opioid pathways within the brain (Woodhams et al., 2017).

The Ease of Abuse

Joe is a 42-year-old White male who is a post-9/11 SCDV, currently lives in Michigan and suffers from chronic pain and inflammation caused during his time in the service. Because of the constant level of pain that Joe was experiencing on a daily basis, his VA provider continued the opioid pain medication that was originally prescribed before being medically discharged. He continued using these TMs for two to three years and eventually began using alcohol in conjunction with his opioid pain medication. Joe stated that two of the biggest negatives he experienced with TM was the ease of abuse and dependency.

Joe explained this event by saying:

"Yeah, ugh, so I mean the primary thing that I was prescribed was Vicodin. Umm, it was pretty much what I had for a few years after getting out of the military. Umm. The negative effects for that for me. Umm, I kind of felt really desensitized. Umm, like, you know, things just, didn't, won't, normally would matter, or me like, eliciting a response from me but just didn't.

Umm, the other thing that I really noticed I, I found myself, I mean the really, for me the big negative effect was that I found myself pairing that with alcohol a lot! Umm, pretty much on a daily basis and, and that was kind of like my remedy... being on my feet, because my injury is my right ankle, knee and, and back. Umm, and so, after getting home from work that was pretty much the standard protocol for a couple years was coming home, taking a few Vicodin, and then downing a bunch of alcohol, and so that was I think probably the biggest negative for me, was just that. I don't know if it's like the ease of the abuse, but I definitely found myself abusing the, the drugs and, and found it to where it was like, you know, I couldn't go really a day without it. Umm, so yeah, I'd say that was the biggest negative effect for me was probably the dependency (Joe)

Joe is not the only veteran, let alone the only SCDV, who has found themselves in situations terribly similar. All these experiences are considered internal, because based on each of the events that each of the participants experienced, their attitudes regarding TM, as well as the use of MC, were altered or changed. Additionally, the decision to initiate the use of MC by the SCDV was also internally influenced by factors out of their control, including geographical location, doctors walking out of exams, abuse of TM, and not being prescribed the correct types or amounts of TM to treat one or more SCD. Furthermore, these internal events are considered the first step in the initiation process for each of the SCDV's in this study to use MC.

Relational Factors to Initiation

The second sub-theme that influenced the SCDV's within my study to initiate the use of MC was relational factors. This sub-theme was considered relational in nature because of the interactions within the spousal/partner dyad, and the influence these events had on the SCDV deciding to initiate the use of MC. Additionally, because positive family relationships have a

major impact, not only on the mental health of individuals but on the physical health as well, it is for these reasons that relational factors are important to this study. In addition, relationships can be influenced positively or negatively by the presence or lack of stress, conflict management, substance abuse, financial issues, trust, intimacy, and communication.

As with the internal factors to initiate, the relational factors that each participant experienced was individual to each spouse/partner dyad, yet each event shared similar contexts regarding their relationships and initiation to start MC. These shared relational similarities are why these experiences are clustered together within the same sub-theme, because these relational factors lead to most of the SCDV's within this study to initiate use of MC. These experiences included substance abuse, loss of intimacy, family stress, lack of communication, and altered personalities, all of which caused relational and family issues within the study's participants.

It's Not Sustainable

Annie, a 39-year-old White female who lives in Michigan and is married to Joe, a 42-year-old White male who is a post-9/11 SCDV, discussed her husband and his abuse of opioid pain medication and alcohol, but she experienced it through the relational context. Annie witnessed not only the substance abuse but also the physical toll it was taking on Joe, and together they started searching for a medical provider who would assist them in their decision to make the change from TM to MC. Witnessing the daily substance abuse, Annie recommended that Joe look into MC in the hopes of him finding a balance between pain management and a healthy relationship. Additionally, Annie talked with Joe about MC and supported his choice to try MC instead of TM and found that Joe was very receptive to the idea. Annie was not only concerned about the physical damage his substance abuse was causing on a daily basis, but also

in the long-term, fully understanding that his daily routine was not sustainable and would eventually lead to other issues in their future relationship.

Annie stated that:

"I think it just, it makes it tough for any relationship to, to maintain when there's, umm, when there's a haze, when there's a fog, umm, when there's a lot of pain involved, it there's, there's so much that is required. Umm, for the person who's in pain, as well as for the spouse, or for other family members. we actively, you know, went in, searching for doctors that would support us through this, through that kind of space. It wasn't only the pharmaceuticals right. It was like, it was painkillers plus alcohol plus, right, and so like these things add up, umm, and, and so when I met him, he was, umm, and drinking quite a bit and, ugh, as well as, umm, painkillers, so, umm, you know, those things, it's not sustainable for the body, right, and, umm, eventually it will not last, umm, that combination. So, I don't think that was a hard sell (Annie)

Joe, a 42-year-old White male who is a post-9/11 SCDV, also discussed his abuse of opioid medication and alcohol, and the toll it was taking on his wife-to-be Annie and their relationship. Joe discussed how Annie bore witness to a lot of his substance abuse and was the one who first brought up trying MC in place of TM. Joe realized that his relationship with Annie was important to him and decided to look into MC. Joe was further convinced to try MC in place of TM because he was able to witness the effects of MC when Annie started using MC in place of her own TM. Furthermore, Joe understood the damage he was doing to his physical condition and his relationship and understood that this was not sustainable for the long-term and that he needed to make a change.

Joe explained this event by saying:

"I will say, though, that when I met, my wife Annie, umm, we met, about a year after I got out of the military, or maybe just, well, I guess, no, it was about, probably about seven or eight months after I got out of the military. Umm, and so once we met, I know that she did witness a lot of this (taking Vicodin and then alcohol), and I don't know if it necessarily had a negative impact on her, but I know that she bore witness to a lot of this abuse, and it was one of the reasons why she, recommended that, I, you know, revisit Cannabis. I think one of the whole reasons why, she kind of like reintroduced this to me, umm, you know as, as something to, to, to try essentially (Joe)

As a couple, Joe and Annie were fortunate enough that they were able to recognize that Joe was on a path that was not physically sustainable for him, nor was his substance abuse healthy for their relationship. By communicating with each other regarding Joe and the daily substance abuse, relational stress was reduced, and the decision was made to locate a medical provider that would assist Joe and Annie in their choice to use MC in place of TM. Additionally, by choosing to try MC, Joe was making a choice that his relationship with Annie was important to him, and with her help he ended his cycle of daily substance abuse, stopped taking TM, and started to utilize MC. In addition, the "haze and fog" that Annie spoke of Joe being in while taking TM was lifted, and he was able to start working toward reaching his full potential, not only in life but in his relationship with Annie. This is something that will be addressed later within this document when I discuss the expanded mental capacity sub-theme.

They Made Me a Monster

Popeye, a 48-year-old White male who is a pre-9/11 Gulf War era SCDV who currently resides in Colorado also addressed his experiences with opioid pain medication and the impact they had on his relationships with his spouse and children. Popeye shared some similarities with

Joe and how it was his spouse that brought up the topic of MC, but when Popeyes wife approached him, it was in a hugely different tone. When Olive reached the point where she decided to talk to Popeye about his current TM usage and trying MC, she had also reached the point to where she felt their marriage was going to end.

Popeye described the event by stating:

"Well, umm, first of all was ugh, I have a lot of gastro problems. So, it was a constant, battle with my stomach of pain and issues, of just... Also, those types of medicines seem to cause more side effects, gastrointestinally with my problems. Then I felt the benefits in. Negative effects men, umm. Along with it, with a lot of the pain meds, I was on and stuff for the chronic pain, it, it just made me a monster. Umm, my head, my family didn't know what personality they we're going to get on any given day. Umm, which is when my wife came to me and suggested I try the medical marijuana and get off the pills, or her and my kids might not be around very much longer... Ugh, like said, it was my wife and my kids came to me because they were, umm, tired of the ups and downs created by the use of pain meds (Popeye)

Olive also talked about how she felt their marriage was going to end due to Popeye's use of TM. In addition, she and the children also noticed that his mood would change without warning, and they were all concerned. Additionally, it finally got so bad that Olive and the children sat down with Popeye and pleaded with him to get off the TM and try MC. Olive also felt that the TM were literally tearing their marriage apart, to the point that neither she nor the children wanted Popeye around because of his unpredictability.

Olive explained:

"Okay, umm, Popeye has been fighting this for a long time, and finally I just had to tell him because with the medications he was getting from the VA, and our primary care. It was

causing his mood to, he was really moody; he was more like fly off the handle aggressive, and it just came to a point where it was either our marriage was going to end or he just going to have to try medical marijuana. Because the, the pain medicine and the other medications were. I mean, we couldn't even live with him. It was getting so bad. So, it was starting to affect the kids, it was where nobody wanted to be around him because he would just, you know, fly off the handle, for nothing. He would blow up and I just had to tell him you know we cannot do this as a family, for me and the kids and for himself I'm like, we, you, you gotta get off this medication, and we'll try any other avenue that we have too, so. So, I could, honestly say I don't really see any positive out of the traditional medications. Umm, the main reason is the pain meds and the other medications, I, it was gonna tear our marriage apart. Yeah, and the kids. I, I think it was my two oldest daughters even wrote a letter to the VA on the, you know, the change in their dad. Poor Things. So, I pushed him to get his medical marijuana card. Me and the kids sat down with him and let him know, you know, this is, I think we should try this and see, and 100% turnaround on his mood swings and everything it, more tolerable. He's actually is able to do things with the kids and it's way better. Hundred percent better. I mean, he has his days where he's hurting still and not feeling good, but way better than the traditional medicine (Olive)

Popeye was fortunate that Olive and the children had already explored MC as a treatment option and were accepting of it, and they were fortunate that he was willing to get off the TM and attempt a MC regiment. This is not always the case with some SCDV's, but for Popeye and his family, he was willing. Unfortunately, while this impacted his ability to work and provide for his family, he and Olive were eager for him to use MC in order to save their family. The impact that MC had on Popeyes ability to work is something that I will discuss in later sections, when examining trade-offs.

I Was Not the Person She Fell in Love With

Stanley, who is a 30-year-old post-9/11 SCDV currently residing in Michigan, discussed the toll TM took on his daily life, in addition to his marriage. Stanley also discussed how when taking TM, he felt without emotions, positive or negative. Furthermore, Stanley spoke about feeling more depressed while on TM, leading to a loss in his interests, hobbies, as well as marital intimacy. Likewise, he also talked about having a sense of being in a "flat-line" state which affected his personality to the point he did not feel he was the person he was before the military, the person his wife fell in love with.

Stanley explained his experiences while on TM by saying:

"Yeah, it definitely affected my wife...Umm, I knew I needed help and I needed I first started with therapy just to kind of talk some of these things out, and uh that really help with somebody...me getting help stem from me valuing my relationship with my wife to the point where I don't want our relationship to deteriorate because I'm not getting help. But then when I got the medicine, I just it's just those general. I just felt more depressed, you know, just kind of like blah. So, umm, you know, sex drive down, umm, umm, just unwilling to just kind of be like compassionate or intimate to the point where it's just normal, like husband, wife behavior, Umm, kind of a general loss and like my interests or hobbies. So, just a general feeling, I think, from her of me being a little off while taking those medications...she's worried, umm about the mental health issues that I was having. But now she's also worried that, well, hey, this medication that's supposed to be helping Stanley out is not. And, umm, uh, you know, that's. No relief from there, from any worry, it's just a worried stacked upon another worry, umm and this stems from my perspective, how she felt about the situation. Umm, Yeah...Umm, you know, it did have some acute relief...first starting these medications and feeling, umm, a sense of relief, just kind of like,

in almost like a trance like state. It was very like. OK, whatever, you know, umm...I just didn't like how it made me feel long-term...You know, there was no real highs and there was no real lows. It was just kind of like, uh medium state of flat line umm, and then that it affected my personality in the way I behave. And you know, that's not the person that my wife fell in love with and wants to be with. You know, she fell in love with, with that person before that. So uh, yeah, I would say that the medication affected it in a similar way that my mental health, umm, conditions were affecting our relationship as well (Stanley)

Mae, Stanley's wife, also talked about her experiences and what she witnessed while Stanley was taking TM prescribed by the VA for the treatment of his SCD. Mae discussed how when Stanley would take his TM, he told her he felt like a zombie and did not like that feeling, but she could also see that it would "level" him out. She also noted that other times TM would increase his anxiety and depression, leading him to go to dark places. Mae further explained how she could tell when Stanley would not take his medications, because his mood would fluctuate up and down more than usual, and even lead to some aggressive behaviors. Moreover, Mae spoke about how, by having no emotion, she felt like their marital communication was affected, because when she would come home excited about something, Stanley would not show emotion.

Mae discussed her experiences by saying:

"Umm, so even out, so, with this, it's like, he would go into dark places, umm, and the medications sometimes would just, level him out, but he also felt like a zombie then, but he didn't like because he was a zombie, but I could see that he was. Let's say more, levelheaded on some things, but then, like I said the anxiety and then even cause depression and things like that he would have. He would still go down those dark holes as well. But sometimes I could tell when he didn't take, uh, it because then his mood would go up and down even more. More no emotion. So,

I guess it's really not a positive talking about it, (laughs), I guess from the extreme where we were before, with no medication. It's, I, I guess is what I'm saying as a positive where... I felt that... Yup, and so that it, it, that it helped him to kind of maintain level, but I know at the same time, like he said, it's like I, I don't feel anything. It's, there's no emotion, but umm, you just wouldn't get like I said, before the medication, sometimes there's a little bit more aggressive or something and then, this just, like I said, it zombied him out, (laughs), I don't what to call, umm, him out. So. Umm, I guess the fact that, that I could say was that, since there were no, emotions, like when I was really excited about something, umm, he wasn't. I mean, uh, just because, like I said, as you said, numb, that's a good word. He was numb. Umm, and so, that sometimes caused, (laughs), umm, some discrepancies in the marriage and communication, like, why aren't you upset or why aren't you happy about this, umm (Mae)

I Wasn't a Pleasant Person

Junior, a 66-year-old pre-9/11 SCDV who lives in Florida, also talked about the effect TM had on his personality. He spoke about being an unpleasant person to be around while he was taking his TM prescribed by the VA. Furthermore, Junior discussed how his son was impacted by his moods and how it took a toll on him.

Junior stated:

"Ugh, well made me moody and cranky, and you know wasn't, wasn't a pleasant person to do deal with. Ugh, well at times it, it, it ugh, made it pretty testy. Ugh, well, you know, they had to deal with me, help me out. Ugh, especially my son, deal, and, tried to give me relaxing massages or do whatever it would take for me to, you know, relax and chill down, but a lot of strain on him (Junior)

Junior also expanded on how a friend introduced him to MC, and after trying it he found it provided more relief than TM. He said:

"And ugh, one day I after coming back from the VA with, ugh, several large canisters of ugh, narcotics. Umm, a friend of mine came down, ugh, I was in New York at the time. Friend of mine came up from Florida and, ugh, we, sit down and smoked a few and, ugh, it was, ugh, I was doing pretty good at that point. Ugh, and it kept me going for quite a few years (Junior)

Because positive family relationships have a major impact not only on the mental health of individuals but on the physical health as well, it is for these reasons that relational factors are important to this study. In addition, relationships can be influenced positively or negatively by the presence or lack of stress, conflict management, substance abuse, financial issues, trust, intimacy, and communication. Furthermore, the examples above help to highlight how TM can impact the relationship to the point of stress, thereby leading to the SCDV to initiate the use of MC.

Systemic Factors

The third sub-theme that influenced the SCDV's within my study to initiate the use of MC was systematic factors. This sub-theme was considered systematic in nature because they are external to the family unit, but still interact upon the family unit. These factors can also affect the family unit, due to the systematic social or political influence that can impact inward on the family unit. As before, while each of the SCDV's had individual experiences, they also shared experiences that were similar in nature. These shared relational similarities are why these experiences are clustered together within the same sub-theme, because these systematic factors lead the SCDV's within this study to initiate use of MC. These experiences included fear of losing VA and federal benefits, as well as feeling they could not talk to their VA provider

regarding MC, all of which were caused by systematic factors that were often out of the control of the study's participants.

Fear of Losing Benefits

Popeye spoke about his experiences related to receiving VA benefits and how it took appeals from him to overturn the VA's original decision to not rate Popeye as a SCDV. Fortunately, he was able to finally receive benefits for his SCD's after being categorized as a SCDV. Unfortunately for him though, his VA PCP did not follow the VA house directive related to MC use by SCDV's.

He explained his experience by stating:

"No, ugh, you know, fear of losing any benefits at the point when I started, I wasn't receiving any benefits from the VA. Umm, I had a real bad, umm, practitioner here at the small town that I live at, that really fought me on my claims, and I just, in the last, six months got my appeals overturned. So, I had a rough time, you know, getting recognized or anything from the VA, any type of help actually, you know what I mean. Oh yeah, that's been a fear, you know, since we started it, umm, and I receive benefits, but I do now know that, living in a state where it's medically legal (MC) that I think they can't, they can't use it against me, now, is the way I understand it (Popeye)

Olive, Popeye's wife, also discussed how they had to fight the VA for Popeye's benefits and the fear they shared of him losing his VA benefits. Furthermore, she also discussed how she has witnessed how some VA PCP are for the use of MC, whereas others are totally against the use of MC. Olive also pointed out how, now that Popeye is going to the VAMC instead of the VA CBOC, he was utilizing the VA more for his healthcare but there were still some less-than-positive experiences with the VA and his use of MC. Additionally, Olive was not sure if Popeye

had disclosed his MC use to his VA PCP, but she felt he had not due to his fear of losing his VA benefits.

Olive stated:

"Umm, you know, I don't even know if he's really even talked to the VA medical team. I know whenever we've gone to a lot of the appointments. He always this he uses medical marijuana. A lot of people are against it. Some are for it, but a lot of them are against it. I think they need to get it out there to more and more vets, but. I think it's due to the possibility of losing his benefit, the VA benefits. Umm, I know we've fought really hard, and we're still fighting, ugh, with the disability and all of the effects and stuff from, being in the military. And you know, I'm really am not sure because a lot of his appointments they won't even let me go to anymore (laughs), and before I would go with him, but now I'm like, you gotta wait. You can't go. So, I'm not sure if he's discussed it with any of them. Umm, with the VA. Umm... he does go to the VA more regular now, but there's been some not so positive, experiences with the VA, dealing with the VA (Olive)

Not While in the Military, but Told to Look into After Military

Mae, who is married to Stanley, spoke about how when she and Stanley were living in Texas and while Stanley was still in the military, his counselor mentioned that MC might be something to look into in the future as a treatment option. Unfortunately, Texas does not recognize MC, so it was not an option for Stanley, even after being discharged from the military. Mae also said that once she and Stanley moved to Michigan, what his counselor had said about MC being an option for him to look at, really stuck with him and led to him exploring MC. In addition, Mae also stated that Stanley did not discuss his usage of MC with his VA healthcare team until his had to provide a urine sample. At that point, Stanley felt he needed to disclose his

MC usage to his VA healthcare team, knowing that it would test positive for Tetrahydrocannabinol (THC).

Mae explained what she witnessed by saying:

"In the military, who mentioned it, to him at one time, and it was not an approved thing, but she said if you know, if you ever move somewhere, because we were in Texas at the time, and that's not, but if you happen to move somewhere or, uh, you should look into it. So, that always stuck in his brain. I remember him telling me about that. Umm, and so when we, umm, when we relocated to Michigan, umm obviously you can get it now, it's rec. But you can also get a medical card when we first moved here. I don't think he, umm, umm, to my knowledge, I don't think he informed them that he was doing that. I know after the fact. He had talked to his VA team because he told them, because it's going to show up in his urine test. Yea. That he's like, you're going to find it. You're going to see it. I don't think he did consult it, umm, I, I'm trying to remember, I don't think he did, umm, took the initial, but I could be wrong, but I, I don't think he did (Mae)

Stanley, a post-9/11 SCDV, also voiced his fears about the VA disability rating system and his choice to utilize MC. Furthermore, he talked about how he had just received his disability rating from the VA for his SCD's and how he was fearful about testing positive for THC during his annual urinalysis and the affect this could have on his disability rating.

Stanley stated:

"I didn't discuss it with them at all, and I was always afraid to because you know, I had just gotten my disability rating and uh, I was actually just afraid to even come up positive and like my annual urinalysis. Umm, so, I didn't discuss this with them at all (Stanley)

Stanley is a great example of the influence the VA system and the healthcare providers can have on a SCDV who chooses to utilize MC. Additionally, because some VA healthcare providers fail to follow the VA house directive protecting SCDV's who elect to use MC, undue stress can be added to their daily lives. This stress oftentimes stems for the SCDV being fearful of losing their much-needed VA benefits, even after being advised by healthcare providers within the military and VA systems.

Don't Ask, Don't Tell Policy

Junior, who is a pre-9/11 SCDV, also talked about how he felt it was up to the VA healthcare providers if they decided to follow the VA house directive. Fortunately for him, he did not feel like he was in danger of losing his VA benefits, but he did feel he was put into a situation where he could not openly communicate with his PCP. Junior talked about feeling like it was a "don't ask, don't tell" type of attitude when it came to his use of MC and discussing it with his VA PCP.

Junior stated:

"Ugh, well, you know, no, they haven't really tried to do anything else, they haven't, umm, messed with our benefits or anything like that, there's ugh, a few directives that was put out, umm, acknowledging some of our use, but not acknowledging it. You know what I mean.

Umm, so, it's basically a don't ask, don't tell situation with them (Junior)

Mary, Junior's partner, also spoke about how she felt the VA was "totally" against the use of MC by SCDV's. Moreover, Mary believed that it was due to lack of knowledge regarding the use of MC that led VA healthcare providers to be so against it. She further remarked that if VA providers were to gain a better understanding of the different uses of MC and why SCDV's chose to utilize it, they might be more supportive. Unfortunately, Mary, who is employed by the

VA as a healthcare provider, knows that the VAMC and CBOC earn "Vera" dollars, but only if the VAMC or CBOC provides services to SCDV's.

Mary stated:

"With the cannabis, ugh, there's a lot of, ugh, doctors who don't know, about what it does, umm, to them, it's not an avenue to look at because the VA is totally against it. If more providers got together with the veterans that use the medical Cannabis and understand their reason why they need it. Then the VA might change their mind. Umm, but then again, with the VA, everything is about these "Vera" dollars that they get, and the more dollars they get, the more money they get toward, different programs (Mary)

I Needed Those Benefits

Joe, who is a post-9/11 SCDV, likewise spoke about how he was also fearful of losing his VA benefits. In fact, Joe was so afraid of losing his much-needed benefits, he did not talk to his VA healthcare provider at all about his MC usage. Joe was still attending physical therapy, as well as having additional surgeries scheduled, and he could not afford to lose his VA health benefits.

Joe stated:

"I did not at all (MC). Umm, and the whole reason was that I was afraid, ugh, that I would get kicked out of the system, and I, I needed those benefits at the time because I was still going through physical therapy, umm, you know, I still had surgery (laughs) that were being scheduled, and yeah, I, I could not lose those health benefits, umm (Joe)

Furthermore, Joe also discussed how he felt unable to make decisions regarding his own healthcare for fear of also losing his federal financial aid/funding. Knowing that he could lose his ability to attend college under federal funding, Joe had to sign documents saying he would not

utilize or grow MC. Because of this, Joe felt like he did not have the ability to choose his own healthcare options.

Joe said:

"For the 10 years from 2008 to 2018 when I was in school. You know, one of the reasons why we didn't grow, well the reason we stopped growing is because I was on federal benefits. So, I mean, I was fearful of that, and then after I got done using my GI bill, I was on a National Science Foundation Fellowship, umm, for my PhD, and again, I was in a situation where I had to sign a disclosure saying that I wasn't, doing any of this, and essentially, you know, because I was, was accessing federal benefits. I, I felt like I couldn't actually, you know, I couldn't, I couldn't support my own health outcomes (Joe)

Joe's experiences help to highlight the systematic factors that can affect SCDV's ability to choose MC as a healthcare option. Not only are SCDV's impacted by VA and federal regulations and policies, but for those SCDV's wishing to attend college, their decision to use MC can affect their federal funding. This is just one more pitfall that many SCDV's can find themselves in.

Ability to Choose Healthcare

The last sub-theme under factors to initiate MC by a SCDV, is their ability to choose healthcare. For most, if not all SCDV's, their ability to choose different healthcare or medical insurance is extremely limited, and most times they are only eligible for VA healthcare. This is most often related to the rules and regulations surrounding the Affordable Healthcare Act. Under this act, all SCDV's are considered to have full coverage insurance through the VA and are ineligible for private insurance. Because of this, SCDV's are unable to have state-required MC paperwork filled out and signed by their VA PCP. Unfortunately, this leaves them with few

options other than to find an outside healthcare provider who is willing to fill out their paperwork while paying for this out of pocket. This too can limit a SCDV's ability to use MC in place of TM.

They Fail to Follow Their Own Directive

Joe, a post-9/11 SCDV, spoke about his experiences with the VA and how his fear of retribution kept him for disclosing his MC usage to his VA PCP. Joe also talked about his belief that the VA healthcare providers did not follow their own house directive regarding MC but instead let their personal feelings and beliefs affect his ability to choose MC as a healthcare option. Joe is one of the lucky ones, because he also has private insurance through his employment and utilizes it in place of his VA healthcare. This is mainly due to his lack of trust in the VA system and feeling like he could not discuss his MC use with them.

Joe stated:

"I mean, I, I don't know, because I have not been open with them about it, umm, mainly for fear of retribution right. I mean I know that the VA has policies, but we've all had (laughs), we've all had primary care physicians at the VA, that let their political leanings or their personal beliefs bleed over into their daily practice and, that's the thing I've always been afraid of is that, and I, and I've been moving around for most of the time since I've been out of the military because I've been in college. Umm, so I've been moving around to places that I'm not from, and so I don't you know most of these care providers are new to me, and I just, I don't have the confidence in the VA system to, to, you know, to really make sure that I don't get screwed over for disclosing something that I'm using for medical purpose. Umm, because if someone's personal beliefs. I haven't actually had VA care about the last four years, because I work for a

large Midwestern university, and I have private healthcare now, but I do speak with my, my primary care physician, umm, openly about the use of it (Joe)

Again, Joe is fortunate because he has private healthcare insurance that he can use in lieu of his VA healthcare. For many SCDV's, this is not an option due to not having private insurance and being forced into utilizing the VA for primary healthcare, again limiting their ability to choose MC as a healthcare option.

I Heard Horror Stories From the VA

Mae, who is married to Stanley, a post-9/11 SCDV, likewise spoke about what she witnessed when it came to health insurance options. She discussed how fortunate she felt, knowing that Stanley had health insurance options that other SCDV's did not. In addition, Mae expanded on this by talking about the negative stories she had heard about the VA and SCDV's not receiving the treatment needed. Because of this, she decided to discuss using private insurance instead of the VA healthcare system with Stanley, to which he agreed. So, currently Stanley uses private insurance for everything healthcare related except to go to the VA for his annual physical. Mae stressed how fortunate she felt, knowing that many SCDV's do not have the option for private health insurance.

Mae stated:

"I remember when Stanley first got, umm, we're talking about getting insurance and I think it was, when we first moved here, it would be through my job, and he's like, well, I have the VA and I'm like, uh, we had this talk, and like wait, let's get you added, and now things have changed, and it's all through him now, but, umm, because I've heard horror stories, (laughs), you know, umm, from the VA, umm, that they can't get the treatment that they needed, and I'm like, I'd rather you have a private doctor, you have the ability to do so, through the private

insurance, you know. And so, yeah, we're very fortunate in that, umm, like I said he, where he works now, he has very, umm, good health insurance, and so, we're fortunate enough that we don't have to rely on just the VA, and I know a lot of people do. So, I don't take that for granted, (laughs)... he only goes to the VA, his annual appointment in October, he just went. I know they still do all the blood work all, of that and I think he's told them. Umm, but he does go just, umm, to maintain, almost feel like to maintain relationship with the VA (Mae)

Both of these examples illustrate the positive effect private health insurance can have on the individuals within the family, as well as the family. Furthermore, by having access to private health insurance, the amount of stress related to the use of MC by a SCDV is greatly reduced, knowing that their private PCP supports their choice to utilize MC. The increased stress from using MC as a SCDV oftentimes is due to the inconsistencies of VA healthcare providers in states that recognize MC failing to follow VA house directives. Instead, these providers let their personal beliefs and views influence their attitudes regarding MC, and the SCDV's are the ones who suffer. Their fear of losing financial and medical benefits, as well as feeling unable to openly communicate with their VA healthcare providers, can also increase the stress these SCDV's and their families suffer, all because the SCDV chooses to use MC.

The above theme and sub-themes highlight the many factors that SCDV's and their spouses/partners went through before deciding to use MC. When it came to the SCDV initiating the use of MC, they each went through the same factors to initiate but each experienced it based on their and their spouse's/partner's lived experiences. In addition, each of the participating dyads experienced their own individual factors for the SCDV to initiate the use of MC, but each couple was impacted by their own factor leading to initiation. Again, while each of the participants had individual experiences that impacted their decision to initiation the use of MC,

many of these experiences shared similar elements that fit together into one of the themes and sub-themes.

Medication Stigmas

The next theme that emerged from the data revolved around social and familial stigmas regarding different medication options. This caused every SCDV or other members of their immediate family to feel stigmatized, regardless of what medical option the SCDV decided to adopt as part of their healthcare regiment. These included stigmas aimed at the current and ongoing opioid crisis, not only within the VA but all healthcare facilities and providers across America, as well as stigmas about the use of MC.

Furthermore, immediate and extended family relationships were strained, sometimes leading to other family members not visiting because of MC usage by the SCDV. In addition, some SCDV's suffered personal conflict in their decision to utilize MC, knowing that it goes against everything they have taught their children about not using "drugs."." Likewise, some spouses/partners questioned everything they had learned as children in school about "just say no" and the D.A.R.E. program. Fortunately, spouses/partners and children were open and willing and sometimes even guiding SCDV's toward the use of MC instead of TM.

Opioid Stigmas

When we hear the term "opioid crisis" it no longer has the impact it once did.

Unfortunately, this is due to the length of time this crisis has been going on and how the "crisis" is no longer front-page news as it once was. This has caused some people to overlook the ongoing crisis and believe it is under control. Additionally, TM is more socially acceptable than MC, even while the side-effects of TM can be severe verses MC. Regrettably, many SCDV's are still using opioid pain medications and not always in a safe manner as prescribed.

Pharmaceuticals Are More Accepted

Annie, who is married to Joe, a post-9/11 SCDV, voiced how Joe did not discuss his MC use with his family, including his parents, because of the social stigmas surrounding MC. She spoke about how opioid medications are more socially accepted, therefore making it easier to talk about with family.

Annie said:

"I know that since he's been using cannabis, he, yeah, he, he wasn't always, you know, up front with family, umm, in the beginning. Umm, I think it's easier to be honest about taking pharmaceuticals, which, umm, you know, it's just a part of the system that we live in. Umm, you know, society definitely accepts it (TM), accepts it a, a, bit more. You can, umm, you can, you can talk about it openly. Umm, which I think is, is huge on mental wellness (Annie)

Joe, Annie's husband, disclosed the dark side of opioid pain medications, as well as his lack of communication with his parents. For Joe, he was unable to discuss his MC usage with his family without having to disclose his past issues with TM, namely opioids. Furthermore, it was not until he was able to talk with other veterans and share experiences with them that he was able to open up to his family, but not until he went "public."."

Joe explained:

"Taking a few Vicodin, and then downing a bunch of alcohol... I know, my parents, like they didn't really realize this was even an issue until I, until I started talking about it. Within the last, about the last five years, I mean, I, I never really shared this information before five years ago, and the only reason I started sharing it, was because I had veterans I was working with. That were experiencing, they had the same experience, and I wanted to be able to relate, that story to them, so that we could build a, a bond, a trust around services. Umm, and so, so yeah, I

don't even think my family really even knew about this until I started talking about it publicly, and now I do talk about it in like radio interviews, television interviews and things that I do, for "Helping Veterans and Horticulture" the programming I do around veterans. So, it's been, it's become something that I'm more, open with now, but yeah, I don't think anybody knew about it at the time. How, especially how bad it was, I mean, it was, yeah, I mean, it was, it was consistent (Joe)

Taking Away All the Opioids

Junior, a 66-year-old pre-9/11 SCDV, remarked about the VA reducing and eliminating opioid medications because of the "opioid crisis" and the impact it has had on him. Regrettably, Junior said that he would have some withdrawal symptoms when he would run out of opioid medications. Fortunately for Junior, he was only taking the lowest amounts of TM needed, so the withdrawal symptoms were minimal. Moreover, he is now off all opioid medications and only uses MC in conjunction with non-opioid TM.

Junior stated:

"And now that they're taking away the all the opioids, it makes it even harder. Umm. Well, for me it didn't cause really too much effect because I didn't, I wasn't taking all that much (TM). I absolutely refused to. So, umm, basically, a lot of times when I ran out, I would have like ugh, a small withdrawal effect. I, well yeah, I mean, like I said they take, took away all my pain meds, umm, the only thing they give me now is Lyrica in some Flexeril (Junior)

Mary, Junior's long-time partner, also talked about the VA and how it is trying to eliminate opioids from all treatment plans, regardless of the SCDV's pain level. Being employed at a VA CBOC, Mary has seen the stress and strain that these new policies have on SCDV's and the outcomes that follow. In addition, by being a healthcare professional, Mary fully understands

that no one SCDV is alike, and each has different needs. Unfortunately, due to VA policies regarding the use of opioid medications, many SCDV's are being denied medications, even if the healthcare provider disagrees. Instead, many SCDV's are being treated with alternative treatments including injections and physical therapy instead of TM. Furthermore, Mary discussed how when some VA healthcare providers discover that a patient is using MC, they will use the "opioid contract" against the SCDV, thereby reducing their TM.

Mary expressed her experience by saying:

"You know, everybody's body, ea., ea., their pain level is different, and because of this, opioid crisis, you know, the VA, wants to try to get everybody off of it, and, to me, that's just impossible. I mean, I see other veterans, also suffering the same way. You know, and they just think pain management is better for them because, opp, they'll get a shot, or they'll get physical therapy, or biofeedback, that's all good, but you know everybody's pain levels different, everybody's pain is different. Because his, umm, he doesn't feel his pain is being managed properly. Umm, you know he's, he's told them for years now a couple years now that the pain is feeling is just astronomical. Ugh, just with medications, cause like I said, when, when they, find out you're using medical marijuana, because you sign that consent that you agreed not to use anything outside the VA, that's not off schedule I or II. I mean off of II or III, umm, then ugh, you know they just, eventually dwindle it to nothing. They (VA) put pressure on these, ugh doctors to do this. Ugh, the doctors may not agree, but because they're, put under all this pressure they, they have no, no option but to agree and, push the patient to nothing. Umm. Unfortunately, we had a gentleman, he wasn't getting pain medication for whatever reason, and he decided to end his life out in our parking lot (Mary)

Cannabis Stigmas

Unfortunately, the social and familial stigma surrounding MC are much deeper engrained and can impact family relationships, both immediate and extended. This can lead SCDV's and their spouses/partners to conceal MC usage by the SCDV from friends and family members, again due to the long-standing stigmas attached to MC. Some SCDV's choose to not let these stigmas impact their daily lives and use MC freely regardless of stigmas. This can be seen as a positive, because if the SCDV chooses not to let social and familial stigmas influence them and their decision to use MC, there is less stress in their lives regarding MC.

My Mother and Father Don't Even Know

Stanley, a 30-year-old post-9/11 SCDV, was concerned enough about his parents, and their stigmas about MC, that he did not reveal it to them. He said "I'm very private about my cannabis use. Umm, my mother and father don't even know. So, we just kind of don't talk about it and, they don't really know" (Stanley). Mae, Stanley's wife, talked about how she and Stanley grew up in a small conservative town together and that his father was a police officer.

Additionally, she said that during elementary school she learned that "weed" (MC) was bad. So, she herself had her own stigmas against MC, but she tried to listen and understand where Stanley was coming from.

Mae said:

"Umm, I was, uh, apprehensive, (laughs), about it all. I don't know if you talked about, but we grew up in a very conservative small town together. His dad was a police officer, we took D.A.R.E. way back when in elementary school where, weed is bad, marijuana is bad (laughs). So, umm, I was on the fence. So, I had a couple of rules. I mean, uh, we still do have rules in place right now but, umm, I tried to be open minded. It did take me a little bit to warm up, (laughs), to the whole idea because as I said it was something new to me, and I never thought,

yea, especially with all of talks, we've had, you know, I, I, like said it was just something very new, so. Umm, he made the final decision and I've tried to be supportive, but I will say that at the beginning I wasn't, (laughs), too supportive, just because I, I wasn't sure how it's goanna go (Mae)

Extended Family Won't Come Around

Olive, Popeye's wife, gave an account of what she witnessed in regard to some of their extended family and Popeye's MC usage. Regrettably, Olive told how once some of her and Popeye's extended family members began to find out that Popeye was utilizing MC, they quit visiting. In addition, Olive verbalized her belief that those family members let their personal stigmas about MC impact their relationship with Popeye's and Olive's family, thereby causing them to view Popeye's MC use negatively. Furthermore, Olive felt that her and Popeye's extended family's bias regarding MC was due to larger historical social stigmas, instead of today's current understanding and new socially accepted views concerning MC.

Olive stated:

"Umm, I could say like, extended family members, some of them, umm, won't come around once they found out that, we decided for him to use medical marijuana. So, I guess then that way, they look kind of different, because he was using medical marijuana. I think just because the stigma of, marijuana's had in the past (Olive)

Popeye, a pre-9/11 SCDV who is married to Olive, voiced his experiences with personal and social stigmas around MC, but instead of feeling them from other family members, his were internalized. Alarmingly, Popeye felt an internal conflict surrounding his decision to start utilizing MC, stemming from not knowing how to communicate with his children about his choice to initiate using MC. Additionally, Popeye and Olive had taught their children for years

that *Cannabis* was a drug, that it was not good for them, and they should not use it. Popeye was fortunate, because his wife and children already believed he needed to get off TM and voiced their concerns with him. So, he used it as an opportunity to educate his children not only about the positives of MC, but about his responsible use of MC in place of TM. Sadly, Popeye was forced to give up his career because of the rules and regulations regarding the use of MC at his place of employment. Popeye was employed as a bus driver for a school district, and because he was required to maintain a commercial driver's license (CDL) by testing positive for Tetrahydrocannabinol (THC), he would have been fired. Consequently, by quitting or being fired, Popeye lost income and other family resources but gained more time to garden and now grow *Cannabis* as well.

Popeye expressed his experiences as:

"So, I was bringing a, a, a drug I've always told my kids not to use into the household, you know, it was a tough time for us, umm, figuring all that out. Yes, my whole family does actually, you know, umm, just because we've always been a gardening family, and, and, you know, part of the stigma part of it in the beginning, Mark, was a, I didn't know how to present it to my kids, you know, something that I had, told them was not good all their lives, and you know, I was a bus driver in a school district, so I had a CDL license. So, it changed, that I had to give up my CDL, but my kids have always been in the garden with me, we grew garden, we can a lot, we're in a rural community. So, I didn't see no reason to hide it from them. And I think it gave me an outlet, actually to educate my growing kids, more then they might have got otherwise (Popeye)

Popeye did speak some about personal stigmas and the impact they had on his relationship with his father, as well as how the social stigmas had and had not affected him at all.

Popeye said that when he first started using MC, his father was completely against it and even questioned why Popeye needed MC. Thankfully, Popeye's father noted the difference between how his demeanor was while using TM, namely opioids, and how it changed once he started using MC. After witnessing Popeye's turnaround, his father became much more accepting, making for a better relationship. Unfortunately, Popeye said that the biggest stigma he felt was from society and what type of medication is more socially accepted, TM or MC. Clearly, it is much easier to medicate by taking a TM in pill form, verses using MC as a flower or vapor form due to the recognizably unique odor. Popeye mentioned how he no longer worried about people within society looking at him when he decided to use MC in public, knowing the amount of chronic pain he is in, and the aid MC provides while he is away from home.

Popeye stated:

"Well, it, it did at first, my dad was the biggest one, his that old school that, he is like, what do you need that for you know, umm, it alienated him and I a little bit, until he finally, he now understands and realize the amount of chronic pain I'm under and, and now, that he sees the difference from where I was at on the pain meds to now, he's been a lot more, really accepting now and so, the stigma more comes from the general public... You know, if somebody knows that, and, and I'm not shy about it. If I'm hurting and I'm somewhere, and I'm, going to medicate. You know, I don't really care what anyone else thinks, you know, or pretend, I know physically what it, what it does for me (Popeye)

I Was Pretty Much Alone

Junior, a pre-9/11 SCDV who is in a long-term committed relationship with Mary, discussed how the current social regulations and stigmas around MC were extremely negative when he first started using, mainly because at that time it was still not legal within the state, he

was residing. Therefore, Junior chose not to discuss it with his son, who was a teenager at the time, knowing the legality issues surrounding MC at the time. While feeling very much alone at that time, Junior did have to talk to Mary about his MC use, as well as having to be careful not to use it around her because of the smoke smell, due to Mary's job as a nurse. Furthermore, Junior shared how sometimes going out in public, some people can be offended by the uniquely recognizable odor that MC smoke omits, similar to cigarettes as he points out.

Junior said:

"Ugh. Well, my son at the time was a, a teenager, so I didn't discuss it with him and, ugh, umm, really, I was pretty much alone at that point. So, it didn't affect anybody else. Ugh. Yes, I had to discuss it with umm, ugh, Mary because she's a, a nurse and, umm, she, yeah, we had to be careful. Especially since it wasn't legal yet down here. The, ugh, just, you know, the smoke in itself, you know, throughout the house, ugh, on your person when you go out, you know, people, you know, catch a whiff of it, just like tobacco and, they're either offended or whatever. Mary, just, I just kind of keep it away from her, because of, umm, of her job (Junior)

Big Movement at the Time

Joe, a post-9/11 SCDV who is married to Annie, talked about his experiences with both personal and social stigmas around MC, but in a much more positive light. Joe pointed out that after being discharged from the military and while living in California, MC was becoming a large industry and much more socially acceptable. In addition, Joe's soon-to-be-wife, Annie, was also using MC at the time for her illnesses, and he noticed the positive impact it was having on her. Furthermore, Joe was looking to get off his TM because of his abuse of them combined with alcohol. He figured if MC did not work, no loss, but if it did work, his outlook was positive. The

only negative stigmas Joe pointed out were in regard to his parents and how they were not supportive at first, but now are.

Joe stated:

"It was a big movement at the time in California, and in the mid-2000s, the industry really started to develop. There were delivery services that were now available, there were commercial growers' licenses that could be acquired through the state, and so, there was a, a, a, a burgeoning industry, umm, in California at this time, and so, I was living in Orange County at the time, and it was all over the place. So that was one of, I mean just the knowledge of it being something that was around, it was being prescribed for medical use, umm, that made me think about it quite a lot. Annie had an influence and, and with that, I mean, when she started talking about it, and she was, she's, she was a, a, umm, using it at the time as well. Umm, when she started talking about it, what was, it was doing for her medically, I mean, that really kind of resonated because I could see the immediate effects of her using Cannabis and what that did for her physically. And so, I knew that it was having a, a positive impact for her and I, I mean it, I didn't, the first, the thing for me is I knew I was hitting dependency, when all this was happening, like it was not, I was not, ugh, a you know, not blind to that. I knew that that was a problem, and I knew that I needed to get away from it somehow, and I figured that, like what was the harm, like I'd smoked weed when I was in high school. It didn't cause any issues for me then, and I thought, you know, it's a pretty low risk kind of endeavor. If it doesn't work, it doesn't work, but if it does work, I mean, maybe it can help me get off of some of this other stuff that I'm using (TM), you know, constantly to, to deal with ugh, pain management. Annie was the only person that I discussed any of that with, umm, it wasn't really, my parents never, they never really didn't, I guess now they are, but in the beginning when I was started using Cannabis for this. They

weren't very supportive of, of this kind of use of marijuana, umm, but I know that, like, I mean Annie was the person who essentially, I, I started this with, and I worked through this with, she was my support at the time for doing all of this, I mean, that, that all, all was through her. But yeah, my parents and things like that, we weren't, none of that was, was really discussed and it, I don't think it would really be seen as a positive either (Joe)

The above theme and sub-themes show how stigmas regarding both TM and MC can have a major impact of these SCDV's and their families. Ranging from no longer visiting with extended family members to losing many TM options to the opioid crisis, SCDV's and their families are suffering the consequences. In addition, many of these SCDV's discussed how their parents were the individuals who were oftentimes the hardest to convince, but once they noticed the differences between TM and MC, many quickly came around. Unfortunately, personal views and beliefs are easier changed than social views and beliefs, but as more and more states medicalize the use of MC, the faster change may come.

Family Effects

The next theme that emerged from the data revolved around family effects and the differences between both TM and MC. Additionally, every SCDV and their family felt family effects that were experienced with the use of MC that TM did not provide. In addition, there were four sub-themes that also emerged from the data including quality of family time, family dynamics, engagement with the outside world, and expanded mental capacity. Fortunately, all of the families within my study experienced better quality of family time, better family dynamics, better engagement with the outside world for the SCDV, and expanded mental capacity. Any one of these by themselves would help improve outcomes for most families, but when taken all together the impact on family health is clear.

Quality of Family Time

The first sub-theme that emerged from the data is quality of family time. Interestingly enough, data reported by each of the dyads within the study lends strength to the idea that there is a positive increase in quality of time associated with MC over the use of TM. Furthermore, some participants discuss how TM can cause loss of communication within the dyad, as well as how TM can impact daily activities. Fortunately, every dyad within my study noticed tremendous changes in the quality of family time with each SCDV, once each SCDV started using MC in lieu of TM.

I Really Alienated from People, My Family Included

Popeye, a pre-9/11 SCDV who is married to Olive, spoke about feeling alienated while using TM, not only from people, but tragically from his family as well. Popeye explained that he did what many members of the military are taught, to hide his pain away and not let others see it. In order to do so, Popeye said he fought his pain and refused to use TM knowing what they did to him. So, he hid himself in his workshop, thus reducing the possibility of his "snapping" and verbally yelling at his family. In addition, Popeye also talked about how when he was in pain and his family could tell, he felt like it amplified the amount of pain they felt for him, thereby further alienating him.

Popeye said:

"Oh, they want to be around me, you know, before, before a lot of time man what I was trying to do to protect my family, if I felt my pain coming on, and I was fighting the pills (TM), trying to, because I knew what they (TM) were doing to me, I would find myself hiding from people. I would go to my shop and stay away, isolated, because I didn't want to, I knew with the pain, that I would sooner or later snap and attack people, verbally, and it, it, it wouldn't take

much to set me off. So, I really alienated from people. My family included, because I was really, the military in me trying to hide my pain. You know, I just didn't feel nobody else needs to see that. And, and then, I always felt, if they saw my pain and felt it, it made theirs worse. so, you know alienated me big time (Popeye)

Olive, who is married to Popeye, spoke of her experiences living with Popeye while he was still using TM, as well as what she witnessed after his decision to start using MC. According to Olive, the quality of family time was greatly impacted by Popeye's use of TM, to the point that no one within the family wanted to spend time with him. In addition, anytime a family member was around Popeye, they always felt as if they needed to tread lightly due to the unpredictability of Popeye's mood. Olive also noted that prior to Popeye being on TM, he used to do a great deal of outdoor activities with her and the children, but after being on TM, it got to the point that no one wanted to be around him to do these things. Unfortunately, Olive did share that for many years while Popeye was following his VA provider's orders and using different TM, she felt like the children missed out on having a quality relationship with their father due to his explosive mood swings and days hiding in his workshop. Thankfully, Olive validated that once Popeye switched from TM to MC, there was a dramatic change in him. Olive noticed that their children now wanted to spend time with Popeye and that he was no longer hiding out in his workshop in pain because MC help him to manage his chronic pain and eliminate his extreme mood swings. Additionally, Olive also noticed that Popeye was able to do more activities outdoors with his children than while he was on TM, but she also pointed out that he still could not do all of the outdoor activities he once could. Her biggest point was that it is not so much what they do but that they do it as a family and the quality of time together is much more positive since Popeye started using MC. Olive also shared how she senses that their children are

much happier since Popeye started using MC, thereby increasing the quality of family time spent together.

Olive stated:

"Yes, lots of stress, that nobody wanted to be around him. So, we, you, you kind of had to tiptoe, because you didn't know what would make him, you know, get upset, and it really affected the kids, and there was a huge drastic change when, he quit taking the medication and we started trying the other avenues of the natural medication (MC). Umm, he used to do a lot of stuff with the family, and with the kids and he's really into hunting and being outdoors and doing all that stuff, and our youngest is, umm, our boy. We have three girls, and then we have one boy. He used to do tons of stuff with my son, and with all of this stuff (TM), it was, nobody wanted to be around him to be able to do things. So, it (TM) cut a lot into the family. Umm, doing anything as a family. Umm, the one thing I could say is we've tried for a long time and a lot of years on the traditional medications. So, there were, a lot of the kids' years where they really didn't have a good relationship with their dad because of the different medications and just what it (TM) was causing. His mood swings and all of that stuff. So, I would say, that, it (TM) did not have any positive effects, that it (TM) was more of a negative effect, on the whole family, as a whole. Oh, it's tolerable, the kids, I, you know, do more family things, spend time together, before it would be, you didn't even want to be in the same room because he was so, agitated and easily irritable and just get mad over nothing. So now it's a lot more spending quality time as a family. Umm, him being able to go out and enjoy the things that he likes a little bit, not like he used to, 'cause he used to be a very avid hunter. Now he doesn't get to much, but he's able to at least go out, and do those things. So, I think it (MC) helped a lot, umm, and I know with the kids, I think, they're *very happy that he does that (MC), instead of the traditional medications (Olive)*

All Psyched Up for Next Day

Mary, Junior's long-time partner, explained how her and Junior's quality of family time and their daily live are impacted some days by Junior's level of pain. According to Mary, because the Veterans Affairs (VA) reduced Junior's medications so much, he was unable to sleep during the night due to his pain. This in turn kept Mary awake off and on during the night, usually concerned that he was in so much pain, and there was nothing that she could do to help him. By using the EST lens to examine this situation, it is clear to see how Junior's inability to sleep due to pain, his micro-system, affected Mary's sleep, her micro-system. This effect on her micro-system then transfers through the meso-system to her exo-system, to affect her performance at work and in other areas of her daily life, due to her loss of sleep.

Mary stated:

"Well, yeah. Because you know, like we would, umm, you know, get all psyched up that we were going to go out and then the next day, you know, he just was horrible and, I didn't want a chance him leaving the house because, you know he was just in so much pain, you know, ugh, the wheelchair is great, but, you know, sitting in the wheelchair, umm, when he's in that much pain is just not enjoyable for him, I don't think. I mean he's not one for complaining, but sometimes I could tell (Mary)

Check That Work Ethic

Joe, a post-9/11 SCDV who is married to Annie, pointed out how his use of MC made him more aware of what time it was during the day, thereby allowing him to transition from work to family. Joe also explained how before he started using MC, he would work unchecked well past the end of his workday, impacting not only the quality but the amount of time he would spend with his family.

Joe stated:

"It probably has, because it allows me to kind of, you know, slow down a little bit. Umm, it does make me more conscious of kind of, time in general. Umm so, like for example, umm, you know, I'm the type, I'm one of those people that will work from sunup to sundown and well beyond (laughs) that every single day, and cannabis really has kind of allowed me to kind of check that work ethic, I guess, you know, it's not, it, it's, I become more conscious of like how much time I put in the day. Like, I'll look at the clock and it'll be five o'clock, and I'm like, okay, you know, it's, it's probably time to transition out of the office. But when I'm, when I'm not smoking and I'm just kind of in that work mode, it, it just kind of goes and, and it just won't end. Umm, so, I guess it's made me more conscious of that." (Joe)

Joe also talked about how, in order to increase the amount of time that he gets to spend with Annie, they meet for untraditional smoke breaks during the workday. Fortunately for Joe, Annie also utilizes MC, and this allows them to come together during different times of the day, increasing the time they spend together.

Joe said:

"I know that my wife and I spend more time together because, well, we, we both smoke cannabis and we use it medically and so, we have, you know, times during the day. It's kind of like that traditional smoke break at work. You know, there's times during the day where we actually take the time to go and smoke with each other and so yeah that absolutely gives us, it, it increases the time that we're spending together over the course of the day. Because we're doing, we're, we're, we're, collectively coming together over this singular activity of, you know, basically managing our health. Umm, so yeah, I, I can say that definitely has, has actually provided some time for us, umm, that's kind of an interesting thought I'd never really, kind of, of

considered that as, as a, aspect of using cannabis, but yeah it absolutely, ugh, definitely has!"

(Joe)

Annie, who is married to Joe, talked about her experiences with MC and the quality of time she spent with Joe. Annie spoke about spending hours with Joe after they both medicated, and how that time adds up and were some of her most precious moments. In addition, Annie also talked about how she and Joe also spend time together processing *Cannabis*, and this too is quality time they spend together.

Annie stated:

"I would say absolutely positive. Umm, because it's something that we both, umm, ugh, are, participate in. Ugh, we have quite a bit of time together, umm, from the growing of it, ugh, to, you know, creating different ways of using it. Umm, to the time of actually sitting down and, umm, being with it, right and being together. Umm, so yeah, I would, I would say it, it increases our time together. I would say it increases the quality of our time together. Umm, no, no, I could say, you know, yeah, we could sit down and, and you know, enjoy cannabis together and then two hours or three hours (laughs) have gone by, but I don't consider that a negative, right. So, umm, those moments are just lovely, and, umm, when we get them their precious. So no, I would not, I wouldn't say any negatives. And sitting there trimming together, you know, as we know, that takes so long, and it's so tedious and it's such a cool project that, all at the same time right. So, umm, being able to just kind of sit there and, and trim together, that's actually right, like all of these moments. Yeah. Yeah. They, they mean something, they add up." (Annie)

You're Better Than This

Stanley, a post-9/11 SCDV who is married to Mae, explained how since he started using MC, he has become more aware of his attitude toward his wife and his lack of communication at

times. He also realized that during these times he can go outside and medicate, then return inside and apologize to Mae. Stanley further explained that MC helped make him a better communicator, as well as being a happier person who felt MC set him up for success.

"Where medical Cannabis, I can actually, it'll say, hey, you're, you're being, you're going internal and you're not communicating like you should to your wife. You're being angry. You're being umm, standoffish. And I'll go out and, and vaporize and, realize that, hey, you're better than this and you need to maybe apologize or maybe, hey, this is what's bothering me and have a conversation...it's increased my ability to become uh, uh better communicator with my wife or whoever I'm the better. You're more in tune with your, your behaviors and your thoughts and how they're affecting other people around you...I'm a generally happier person... it just affects me in a way that I can be more of a better communicator with my family, umm, it sets me up for success." (Stanley)

Mae, Stanley's wife, discussed her experiences with Stanley's MC use, and the many positives she has witnessed. Like Stanley, Mae also discussed how MC enabled him to become a better communicator, due to the relaxing affect that MC has on Stanley, thereby allowing him to reduce his daily stress. Mae stressed that while MC relaxed Stanley, it did not remove all emotions and turn him into a zombie like she witnessed with TM.

Mae said:

"Umm, I think he probably brought it up too, but communication has been, umm, it's been a big improvement. Umm, he, he usually I sound like this is relevant, but, usually does it at the end of the day, umm is when he usually does it after our daughters in bed and, umm, you can always tell, sometimes even during a stressful day, he won't do it to interfere with anything and, umm, he's very responsible about it but, sometimes during a stressful day, I feel like you just

need to, (laughs), you need to go take something, something to relax, and so it definitely relaxes him a lot. But at the same time, he's not a zombie, like he was before he has emotion, he communicates, umm, and like I said, it took us, a little bit to get here, like at the beginning I wasn't, necessarily an advocate for it, or umm, I was on the fence of how it was going to go. But I've only seen positive things now, umm, with it, and it might have took me a little bit to get there, (laughs). But, uh, but now you can definitely tell, I can tell the days, I mean, it's usually every day that he uses it, but I can tell days that he doesn't, or if he needs to. Umm, and then as soon as he does it, he comes back sometimes, or if we've been having, here's the example, I'm trying to give, if he's been having like, we've been arguing all day, umm, and it's just sometimes we can't communicate. Sometimes after that we can communicate better and come to like a resolution about things. Were before, umm, (laughs) we were just hitting heads, butting heads.

So, don't, don't get me wrong, it's not always that easy, but a lot of times it does help." (Mae)

Family Dynamics

The next sub-theme that emerged from the data revolved around family dynamics. The data reported by each of the participating dyads illustrated how MC allowed the SCDV to become more engaged with their family, thereby allowing other family members to feel more positive about their lives.

He's Always Paying Attention If I Really Need Him

Mary, who is Junior's long-term partner, talked about how she has noticed that MC allows Junior to be more empathetic toward her, even when he is experiencing pain.

Mary said:

"Sometimes he is not paying attention, but that's because his mind is always thinking of other things, I think, even though he says no. Ugh, he's getting older. Umm, he doesn't overdo it,

so, you know, you know he's always paying attention, if I really need him to, you know, like when my father passed away, he, he was there for me, he was empathetic. I mean, you know, even though he was in that much pain, umm, you know." (Mary)

It Makes Me a Better Husband, Worker, Employee and Business Owner

Stanley, Mae's husband, explained how his evening-time MC use permits him reduce the amount of stress he begins each day with, allowing him to have better mental health. In addition, he also talked about how by beginning each day with less stress, he felt like it made him a better parent, spouse, and employee.

Stanley said:

"It uh, carries into the next day, that kind of mental headspace. You know, I had a therapist one time that explained that you don't want to start your day with your glass 90 percent full and stress and everybody keeps pouring the water and your cup overflows. So, if you can start your day with a close to empty glass and you can have people fill up your glass without it overflowing, umm, that's a positive. So, I kind of see it as that. It allows me to kind of lower, the lower the amount in my glass. So, the following day, I'm able to start with a fresher, cleaner slate as far as a mental headspace is concerned, uh, to be a better father, husband, employee, business owner, so on and so forth." (Stanley)

Mae discussed how Stanley's use of MC has help him deal with a lot of his medical issues, yet still having random flares. She also reiterated how unhappy Stanley felt while taking TM and how this impacted everybody within the household. According to Mae, MC has only been a positive in her eyes, and it has increased the happiness within their home.

Mae said:

"Umm, Stanley's happier. Umm he's able to handle, umm, you know his medical issues better with it. Umm, we kind of feel like we have found a solution. For every and not for everything, but for that, for those for the time being, and, like I said, it's less stress, definitely. Umm, and a lot of times, too, don't get me wrong, like medical issues do flare up, umm, and things like that, but overall, I think we're happier family. Umm, with everything like, like I said the traditional medicine, I feel like, he wasn't happy, which really impacts everybody. I mean. Umm. So, he's happy you know and like I said that this affects everybody obviously when someone's not happy or doing well, it affects the whole family to that end. So overall, it's been, uh, it's been a positive thing." (Mae)

It Makes Life Better for Everybody

Joe, who is married to Annie, also talked about how MC impacted his marital relationship in a positive way, in addition to his work. Joe explained that MC allowed him to better manage his emotions, thereby leading to less frustration at work.

Joe said:

"Well, I mean, I was in a better mood. I was sleeping better, and I think that's just kind of, has a cascading effect through a family is, you know, if people are, are in, you know, I guess in a kind of a wealth state, umm, you know, it makes every, it makes life better for everybody, you know, like with work, I would get less frustrated at work, umm, you know, I'd be able to manage my, my, umm, emotions better. Umm, so, I think it's, I, I think, overall, like, I, everybody probably saw positive effect from it, but I would imagine that most of it was seen from kind of like, my calmness, my demeanor, my ability to just kind of, roll with the punches rather than getting kind of fired-up about stupid stuff. Umm, so yeah, I, I would imagine lots of folks saw that." (Joe)

Annie, Joe's wife, stated how when Joe was using TM, he was in less pain and able to be present with people, but due to the heavy sedative effects of these TM, Joe would become subdued.

Annie said:

"Yeah, umm, you know when, when you have less pain, and you're able to, to, to be present with the people in your life. I think less pain allows you to be more present, umm, but, but because of, of the fact that they are such heavy medications. It also, you know, it, it, it subdues you quite a bit, right, it, it, umm, it, it makes us, I don't want to say zombie like, but it makes you very out of it. A lot of the times those medications do. So, it was kind of a catch-22 right. Umm, yes, you're, you have a reduced amount of pain, but you also may not be able to, function to your capacity." (Annie)

Furthermore, Annie discussed how MC not only impacted communication with Joe, but how that communication was positive. She also explained how MC allowed her to work a bit harder, relax a bit better, and to communicate better.

Annie said:

"Umm, it's always nice when you can communicate with your partner, right effectively and peacefully and, umm, and out of, out of a place of love right, and so, when you can kind of put yourself in a different mind, a different, a different state of mind it, it makes a huge difference; it makes a huge difference. Umm, and I, and I mean a positive, a positive difference right. Umm, it just allows us to kind of come together in a different way and understand each other in a different way. It just provides a level of, umm, expanded capacity, I guess, you know, it allows us to push a little harder. Umm, to work a little bit more and allows us to, to relax a little bit more, to communicate a little bit better so." (Annie)

Engagement with Outside World

The next sub-theme that emerged from the data was related to engagement with the outside world. The data reported by the participating dyads highlighted how MC enables SCDV's to engage with the world around them, thereby allowing them to continue in past hobbies.

He's Able to go Fishing

Olive, who is married to Popeye, explained the differences in Popeye's ability to get outdoors and do some of the things he enjoys, between TM and MC. In addition, she also spoke about how when Popeye was using TM, he was more depressed and stayed in the house doing nothing.

Olive said:

"Well, I think it's had a positive effect because before he wasn't able to do a lot of the things he did, but with medical, using medical marijuana he's able to like go fishing. You know, when he feels good, umm, and before he, was extremely depressed, would just stay in the house and not, do anything and just kind of dwell on everything, and now I think he's getting out doing more, being able to do more of what he, loves to do, and be out in the outdoors, where he couldn't before on the traditional medicine." (Olive)

He Sent Me a Picture of an Otter

Mary, who is Junior's long-time partner, told how MC allowed Junior to be more engaged with daily happenings and excited to share his experiences with Mary. Mary said that he will tell her about funny things that happened during the day while she was at work, and if it cannot wait, he will text message her.

Mary said:

"I mean, we're able to enjoy like, if we sit down for a movie now, umm. If we have dinner together, you know, ugh, if something happens to, that was funny during the day when we're not here. Umm, when I'm out working, you know, with the dogs or whatever, you know, sometimes he'll send me pictures in the, in the text message, message one time there was an otter coming down the road." (Mary)

Mary also spoke about how Junior has become more active while using MC, set on rebuilding their backyard. She said that Junior will get an idea and go do it now, instead of sitting in the house complaining all day.

Mary said:

"Ugh, no, cause he's always trying to draw different things, what he's going to be doing out in the yard, and, ugh, when he got his John Deere tractor, and he, just fixed the whole yard and, you know, he, he gets, gets on that tractor and he's got an idea in his head, and he's out there doing it. You know or, built a deck and it's movable. Oh yeah, yeah, you know he's not just sitting around poor me, poor me, poor me, of course he's never, I've never known him to do that. But, you know, umm, I could see a few times, he's been really down in the dumps and didn't know what to do. Umm, but then he tries to snap out of it the next day." (Mary)

I Enjoy Music

Stanley spoke about how when he medicates with MC, he now enjoys things that again in his life that TM took away. Not only did it increase his communication with his wife, but also with his friends.

Stanley said:

"Opposite of traditional medications, when I consume, I like to talk to my wife, I like to talk to friends, umm, I enjoy music, I like to read books, umm I'm, I like to watch. I like to do

things that I know deep down I like to do. But on a traditional medication, it's like you want to do this. It's like whatever, you know. It increases that enjoyability level of things." (Stanley)

Expanded Mental Capacity

The last sub-theme that emerged from the data dealt with expanded mental capacity, and the benefit MC had over TM. The data provided by the participating dyads highlighted the affects expanded mental capacity had on the SCDV and their family.

It's Just Given Me My Creativity Back

Popeye, Olive's husband, spoke about how MC not only allowed him to work around the yard, but how it had also given him his creativity back and his ability to create woodworking's. Popeye said that while on TM, he lost interest in doing these things, and that MC gave them back to him.

Popeye said:

"But I'm a gardener, you know what I mean. So, umm, it's just giving me my creativity back, and doing woodwork and things like that, just things that I can do around the yard and the house to, you know, the hardest thing for me, I think, being ex-military, as well as, as being a man was, giving up my career. You know, mentally, I wasn't able to provide for my family and it, and it, I lost interest in everything for a while, and it's (MC) given me that back. They took it (TM), man I, I couldn't process, ugh. It ah, I was amazing what that stuff did to me." (Popeye)

Get My Head Right

Stanley, Mae's husband, explained how MC enabled him to focus on what happened in his day and what he has to do tomorrow. He also said that MC also allows him to be more positive about what he has to do tomorrow, but also about how he is going to accomplish it.

Stanley said:

"Again, dealing with if you have a lot on your plate and you're constantly juggling multiple different hats and you're trying to progress and accomplish goals, umm, having that little reprieve every day, for me, it's a reprieve, every night. I can go and have ten minutes to myself, get my head right, focus on the things that I have to do. What happened today? What do I have to do tomorrow? And just think, really? Umm. Positively about what's to come and how I'm going to accomplish that." (Stanley)

Mae, Stanley's wife, spoke about how MC increases his mental capacity by tapping into different areas of his brain. Mae said that MC also assists Stanley in becoming a better communicator, as well as helping him with his studies.

Mae said:

"Umm, I will say that the use of it, umm, Stanley, sometimes it feels like it taps into a different part of his brain, umm, and sometimes it makes him. Like right now he's working on his master's as well, he probably informed you, but so sometimes it's like he gets the math problem, or he realizes something, or he when he listens to music, it's a whole different thing. Like I said it, it helps, like I said, it taps into parts of his brain and, to make him understand things, or commu., it helps with communication, or I like the word you used, engage because, umm, I think it does, do that as well." (Mae)

Free Thinking

Junior, who is Mary's long-time partner, discussed how MC permitted him to be more of a free thinker, as where when he was using TM, he was much more withdrawn. Junior said: "I mean, it's, umm, well now that I'm, umm, retired it kind of gives me a little bit more, umm, free thinking. Umm, for the most part. Umm, and it (TM) was more negative and more withdrawn, I should say (Junior)."

Mary, Junior's long-time partner, further talked about MC and the impact it had on Junior. Mary told how while Junior's reaction time might be slower, his mind was clearer, as were his goals in life, and his anxiety level was reduced.

Mary said:

"Yea. Umm, you know the anxiety level is lower, umm, umm, the, the reaction time is a little shorter, but, they're more clear minded and what, what their goals are in life. Umm. You know I'm, we have, so, I've worked with the women veterans and so many of them are medical marijuana." (Mary)

There's No Limitation to What it Allows You to Accomplish

Joe, who is married to Annie, spoke about his experiences with MC and what it has allowed him to accomplish. He explained how he felt he never would have completed his graduate degree without MC, and the same is true for his wife.

Joe said:

"It has not, impacted me, negatively whatsoever. I mean, yeah, I mean, I tell people, you know, there's all these negative connotations with Cannabis, but like, I mean, I completed a PhD using Cannabis daily! And it's like there's, there's no, there's no, limitation, to what it allows you to accomplish. I would definitely say it has had, it has added to the family resource of talent. I mean, I jokingly tell people that I would have never completed graduate school, had it not been Cannabis but, but, but I, you know, my wife and I both are medical users, umm, and we both have graduate degrees, umm, we both are, you know, professionals in our industries. Umm, you know, she runs the, runs our own business, and I work for a university. I think as far as talent is concerned and the ability to acquire, kind of, you know, skills and things like that. I think it's actually probably open doors, more than anything. I would say that, absolutely it played a huge

role in me pursuing graduate studies. I mean, it's the whole reason I went back to school, and then for my wife as well." (Joe)

Annie, Joe's wife, pointed out what she witnessed with Joe's use of MC and his decision to earn his doctoral degree. She also explained how MC has allowed Joe to utilize his artistic abilities more.

Annie said:

"Yeah, absolutely. Joe is, he's so creative, and, umm, just so artistic and when he's able to kind of tap into really, you know, letting go through his body and, and allowing him to, umm, to be in a headspace where he can get there, it, he creates beautiful things, umm, and that's just, you know, his artistic abilities right. He's super smart and I don't think without Cannabis use he, umm, you know, would have gotten to the place that we've gotten to, umm, him doing a PhD, going through, you know, I mean, he's just, he's done so much, he's done so much and, and I think it's a direct contribution to, umm, him being able to have a medication that, that serves him." (Annie)

Health and Healthcare Management

The next theme that emerged from the data was related to health and healthcare management, and the impact MC can have for SCDV's. This theme has four sub-themes that are uniquely different, while still fitting under the umbrella of the overarching theme. These sub-themes include pain management, mental health management, trade-off calculator, and implications for living in different states.

Pain Management

The first sub-theme that emerged from the data were in regard to pain management, and the different outcomes between MC and TM. Additionally, the data provided by the dyads that

participated within the study highlighted the need of SCDV's to control their pain, but not at the loss of their mental capabilities.

Controlled My Pain, but I Was a Blabbering Idiot

Popeye, who is married to Olive, discussed his experiences with TM and the affect they had on his treatment of pain. He voiced how TM caused him to become overly sedated, something he did not experience with MC.

Popeye said:

"Umm, you know, I honestly can't say other than the stigma that, you know that I've felt any negative effects. It's kind of given me my life back where I could get out and enjoy doing stuff with my family and that were, were I was on pain pills and, all, and all of the different things, I couldn't even remember my name on some different days, you know, I was a drooling babbling fool, for the most part." (Popeye)

Olive, Popeye's wife, spoke about what she witnessed with his use of MC and the positive impact it had on his pain. She pointed out how his use of MC has helped him to be able to do more things, because he is in less pain. She also told how MC helped Popeye with more of his SCD's, than just pain.

Olive said:

"Well, the medical cannabis I, has really helped his mood and everything, umm, I think it helped him to be able to get out and do more things than just sitting in the house constantly. He's not as depressed, as he used to be. Umm, it's really helped a lot with his stomach issues. So, I think there's a lot of positive effects on the medical marijuana. I would say that, umm, I'm a big advocate for it. Yeah. Anyways, anyways, it is done wonders, or our family." (Olive)

Makes Life a Little Bit More Pleasant

Junior, who is Mary's long-time partner, talked about his personal experiences with MC and the positive impact it had on his life. He said that MC not only helped with his mobility, but also increased his appetite, something that was good as a cancer patient.

Junior stated:

"Umm, in most times I'm relaxed, umm, umm, capable of, umm, it increases my mobility, ugh, helps me sleep, helps me with my appetite. Umm, being a cancer patient, that was one of my major, umm, reasons for using it. Umm, just make life a little bit more pleasant." (Junior)

Mary, who is Junior's long-time partner, discussed what she has witnessed with Junior using both TM and MC. She pointed out that while TM help with pain better than MC, MC provided relief in ways that TM could not. She also did not feel like it was much of a trade-off for Junior to switch from TM to MC.

Mary stated:

"Well, he was able to walk a little bit better and, umm, deal with pain a little bit better (on TM). Well, he told me that he was gonna go back to it (MC), eventually, because it did things that the other medication could not do. Which I can understand. Umm, you know when you're in chronic pain, you just want some kind of relief, where you can function in life, you know, even if it's just to get up to get a cup of coffee. And, umm, you know, he just wants me to, umm, know that the Cannabis helps him more than not having anything. Yeah, well, like Junior says, umm, you know he doesn't want those high, umm, powerful medications, because they put them in a stupor, where, okay the pain's under control, but, his, he's foggy in his brain. And then a, to me the medical cannabis it works, the opposite direction. Sometimes, ugh, it gives them more energy and pushes him a little bit further." (Mary)

Pain Reduction and Being More Mobile

Joe, a post-9/11 SCDV, said that the only positive he noticed while on TM was the pain management and the increased mobility that came with that.

Joe stated:

"I mean pain reduction. I mean, it (TM) definitely helps with pain reduction, that's for sure. Umm, but I mean, that, I mean I'd say that's probably the only positive about it. Umm, but yeah, I, I'd say pain reduction. I mean, it made me more, I guess, mobile. Umm. So, I think that like, with the pain, you know, being kind of, I guess, managed with, with Vicodin. I was more mobile; I could do more things than, and, and I wasn't in, in, just in, so much chronic pain all the time (Joe)."

Since starting to utilize MC, Joe has found there are techniques he can use to help reduce his pain during the day. He spoke about taking short breaks throughout the day in order to medicate, providing him with the ability to micro-dose throughout the day. He said that this was much more convenient than taking TM, where there were not really options to micro-dose with a pain pill.

Joe stated:

"And from a pain management standpoint, umm, it really, the other thing I really like about it, is that, at least from the smoking standpoint of it, is that I can really monitor my, my dosage throughout the day. Like, I can, I know like if I'm starting to feel, you know, if I'm starting to feel things a little bit on my ankle like, I can go and, and take a couple hits, and I feel fine for the next few hours. And so, it's, I'm able to really, you kind of call it micro dosing. It's like micro dosing, over the course of the day to manage pain and, and I mean, that's the same thing with your prescription drugs, is you're trying to do it over a, over time, and have that release action,

and so, it's kind of like, you know, it allows me to have that same time release effect, as most traditional, pain management, but I'm in control of the, of the time release. Umm, which I really like, and, and I feel like with cannabis that I've had a lot more control over my ability to manage my own pain, than I have with any other, prescription drugs that I've ever had. Umm, it just, it's because of the interactive process of like smoking, from that perspective. Like, I mean I, I literally can, can manage my pain all day long, with very little Cannabis. So yeah, I ugh, it's, it's, it's been fantastic. I mean, it's been, an awesome, I mean, it's been a life changing experience, and it's really shaped most of my life since I started using it again after the military." (Joe)

Mental Health Management

The next sub-theme that emerged from the data is related to mental health management.

The data provided by the dyads that participated in this study illuminated the impact TM and MC can have on mental health management.

General Loss in Interests and Hobbies

Stanley, who is married to Mae, discussed his experiences with TM and the negative impact they had on his life. He spoke about feeling "off" while taking TM, as well as losing interest in his hobbies. Stanley said: "Umm, kind of a general loss and like my interests or hobbies. So, just a general feeling, I think, from her of me being a little off while taking those medications." (Stanley)

He Doesn't Take Any Traditional Medicines

Mae, who is married to Stanley, discussed his switch from TM to MC and why she feels MC is better. She did state that tolerance was one concern, which did not have that big of an impact on her belief that MC was better because of the immediate affects that come with the use of MC.

Mae said:

"Umm, so yeah, he doesn't even use them because he, just, I mean, traditional medicine, a lot of times it takes two to, two weeks to a month to even work, and this is almost, like instant (M.C.). Umm, obviously if you built up, umm, oh shoot, what do you call it, tolerance, umm, might take a little bit more or, versus if it's been a little bit, so I mean I know that's different, umm, with medical Cannabis, but, yeah he doesn't, he doesn't take any of the traditional medicines that the VA would prescribe anymore, umm." (Mae)

We Receive Information Differently

Annie, who is married to Joe, explained the immediate benefits of using MC and the impact that had on Joe. She also discussed how other SCDV's should take advantage of MC, and how it might aid them.

Annie said:

"Umm, yeah, umm, I'm a think it allows us to slow down, umm, to take things in differently. Umm, we receive information differently when we are using Cannabis. We communicate differently when we're using Cannabis, umm, and I think that's huge, ugh, for folks, especially with coming out of the VA folks with PTSD these types of things. I think that's huge, if we can change that just a little bit, makes a big difference. Umm, obviously, the benefits of relaxation, being able to kind of shift, umm, you know, the perception and, and the way the body feels, immediately, umm, is really big, is really big. Umm, so much different from pharmaceuticals, right. And being able to use it in multiple ways, right. Not just from smoking, or vaping or eating, but, you know, being able to use them in a, in a variety of ways." (Annie)

Trade-Offs for Health Calculator

The next sub-theme that emerged from the data was related to the trade-offs for health calculator. The data provided from the participating dyads highlighted the trade-offs that SCDV's and their families must calculate in order to choose their health options.

It's Expensive

One of the only topics from this study that almost every participant agreed on was the cost of MC and the inability to simply pay a \$10 co-pay, as with health insurance.

Stanley said:

"And the only, and then money, I would say, somewhat negatively, because you know, unfortunately, it's kind of expensive to get good quality medicine and, you know, it's, it's not covered like, say, Zasloff, would you buy a traditional insurance? So, I would say like medium on money, but uh, you know, it's still expensive. It's Expensive." (Stanley)

Annie stated:

"You know, it's not the most inexpensive medication. Umm, we don't get to pay a \$10 copay and leave with a, a month supply. So, while it, I, I, I can't necessarily say it's, you know, I'm, we budget for it. It's something (laughs) that every year, if we're not able to grow it we, we budget and, umm, that's very strategic, so, it, it sometimes takes a little more work than, than, umm, you know, we would like, but it, it is, we work it out we budgeted, and we've been doing this for so long now that, you know, it doesn't really feel like a strain, even though there are, of course, you know, like I said, we don't get to just pay \$10 and, and leave. Umm, it, it's a lot, it's a lot of money to, to, to have this medication, unless you're growing it, and that, you know, that's a huge benefit." (Annie)

Popeye said:

"It does at times, umm, you know, 'cuz it's pretty pricey. And there's no insurance or VA don't help with it. Again, being in Colorado, now I have, learning to produce enough to try not to have to financially spend a bunch on it, it's like I said, I had, I lost my job, I'm on disability, the VA is barely started to help me out, umm. So, it was negative when I had to purchase it. You know what I mean." (Popeye)

Olive stated:

"I, umm, the only thing I could say is, you know, the VA would pay, they give you all of your medication, they don't pay and help with the medical marijuana, or even like the salves or any of that stuff. Umm, so, the only thing I could say is the VA doesn't help pay for any of it, if that's the type of treatment, you know, the vet, veterans decided to use." (Olive)

Mary said:

"Now a couple of times, he'll stock up on it, and then, you know, it's, it's, it's you know, \$500, \$600, and that's a clip. But it's worth it, you know, because it helps him so." (Mary)

It's Smelly

While Stanley's wife, Mae, feels petty about one of her trade-offs, she stated that the smell that comes from smoking the flower is something she cannot get over.

Mae said:

"You know, there's really not, umm, now that I'm used to it. I will say the initial, and sometimes it still gets me as the smell. But that's really not enough, I get used to it. Umm, you know, at the beginning, the only thing negative is that we were living with my parents. So, he was hiding it from everyone, I knew, but it, it umm, it would, I mean it has a smell, and my parents were, sometimes talking about, like, does he have a candle lit or something, and it's like, oh my god. Umm, so uh, so, I, I think that cause some, some issues, and the stress of, of where he used

it. I told you at the beginning, it's, it's a very, I don't know, I guess kind of a big thing, I feel like it's a, a petty thing, but I hate the smell of it. So, he has to smoke it outside, like go outside in the garage." (Mae)

I Might Get the Munchies

Popeye expressed one of his trade-offs but said it was actually a positive for him.

Because Popeye had to have part of his colon removed, he has since had a hard time gaining weight.

Popeye stated:

"I think I might get the munchies a little bit and eat too much junk food and all, and depending on what, what strains, I've got and stuff, what I said with the munchies, you know, being a bad thing, but maybe it wasn't true. I had to have half of my colon removed, and I lost a lot of weight during all that stuff, you know, then, cannabis does give me an appetite. So, it, it's helped me to gain some weight back where I was beginning to look really unhealthy, with the amount of weight that I had lost. And it really helps with nausea man, and I get a lot of nausea with the chronic pain, and the cannabis has really helped a lot with the nausea." (Popeye)

His Health and Our Family Than His Job

Olive, Popeyes wife, discussed the trade-off she witnessed, but did not feel like it was really a trade-off. This was in regard to Popeye's decision to use MC, even knowing that this would impact his employment.

Olive stated:

"Yeah, we've always thought about it, and, you know, threw it out there. Umm, with his job at the time, they, the possibility of drug testing. So, we're like, umm you know, do we really do this because we can't lose your job. Umm. So, we came to the decision it is just more, it, his

health, and our family than the job. So, he did go to his boss and let his boss know hey we're going to do this, I'm going to try it and. So, it was, all of us together, making the decision, but I really pushed for it. Umm. Just because we were getting tore apart from the side effects and just the mood swings and everything of the traditional medication." (Olive)

Loss of All Pain Medications

Junior talked about how having his VA practitioner change impacted his TM options. He said that his original practitioner accepted his use of MC, but that his new practitioner was not so accepting and proceeded to remove all of his pain medications.

Junior said:

"Umm, I discuss, I discussed it with every one of them, umm, my transplant, ugh, bone marrow transplant team didn't like it at all. Umm, they're dealing with it now only because I'm, you know, out of their care for the most part. Umm, everybody else just accepted it, until I got a new, umm, ugh, primary care and then she basically is the one that took, away all my pain medications and, ugh, told me as long as I use it, ugh, that, yeah, I won't get any pain, ANY meds, so, I've always, I've always been open with them so." (Junior)

The Amount You Have to Take

Annie, who is married to Joe, talked about the negative trade-offs of TM and how the side-effects far outweighed any benefits they provided.

Annie said:

"Umm, yeah, so, umm, I would say that, umm, oftentimes with narcotics, there's a, a level of zoning out. Umm, and kind of a, a, inability to, ugh, to show up, umm, and to perform, you know, umm, daily tasks. I think that was, I think it's a, a really big one, umm, I think the, the level of, umm, use that you have to actually use those medications at, in order to get relief. Umm,

can run quite high, umm, and, and so I think that is, that is a negative, as well as the amount that you have to take in order to get, umm, relief. Umm, and for him, you know, just overall feeling of, umm, being on something. I don't know if that makes any sense, umm, but the, you know, kind of a, a, a haze, or a fog, I, I think that kind of goes back to that element of being able to fully function and, and, umm, and to show up in your life. Umm, so I, I think that that's a positive, is that, you know, it (TM), it takes the pain away. Umm, I think that's probably the only benefit to them. (Annie)."

Adverse Effects of MC

The next sub-theme that emerged from the data was in regard to the adverse effects of MC. The data provided by the participating dyads exposed some of the adverse effects caused by the use of MC.

The Effects of Smoke

Annie, who is married to Joe, highlighted the main adverse effect of using MC flower, which is the impact of smoking. She did expand on how, by using different forms of MC, this adverse effect could be limited.

Annie said:

"Any negatives from the uses. Sure. I think that, umm, you know, when you talk about, umm, ugh, the effects of smoking right. These things can, can have, have an effect, umm, and so because of that, you know, you try different things vaporizers, umm, edibles these types of things to kind of reduce that level. It can cause, you know, the smoke can cause congestion and these types of things as well." (Annie)

Future Respiratory Issues

Joe also talked about this adverse effect but pointed out that compared to the side-effects of TM, the risk is minimal.

Joe explained:

"Maybe, you know, the only thing I'd say maybe, umm, could be a, a potential future negative effect is, is respiratory issues. I haven't had any to date, but, you know, that might be something because I do smoke it, umm, but I, I mean umm, from other, ugh, as opposed to other, you know side effects from other drugs, it's, it's pretty minimal (Joe)."

It Could Scare the Hell Out of You

Popeye pointed out how different strains of *Cannabis* can have different effects, and if you are unfamiliar with a strain, it could cause increased levels of anxiety.

Popeye said:

"My mood is amazing. I'm pretty happy, most of the time, you know, before I was sad, depressed a lot. Umm, it, it, it you know, it helps with the depression, by far. I really got to watch which strains of cannabis I smoke, some are Sativas, Indica's, umm, so, the feelings can change to make anxiety worse, I've noticed. So, I, I kind of stay away from the Sativa strains and more to a, a sedative Indica type, so that there is a sedative effect, it has gave me my life back to where, that, that the pills were just slowly taking it away one day at a time. Yeah, I think it could, you know, the wrong person, get that it can scare you, because it, can make your heart race a little bit and stuff. So, then you know, a person, not knowing what to expect, it could probably scare the hell out of you." (Popeye)

Implications for Living in Different States

The final sub-theme that emerged from the data was related to the implications of living in different MC states. The participants provided data that highlighted how living in different states that recognize the use of MC can have implications for those SCDV's.

It's Recreational Here

Joe discussed how since he has been in Michigan, he has seen MC become fully legal for recreational use. This has helped Joe by allowing him to grow his own *Cannabis*, thereby reducing the amount he spends on MC.

Joe said:

"Umm, and so, that has been the norm is every six months, we would go and pick up a pound, umm, but, umm, Michigan's, we're just went full recreational last year. Umm, so we actually have been growing this season, and so we won't be purchasing anymore. We've been able to grow enough this season to last us all year and will continue to do that from here on out. It has been a huge financial burden, umm, because it is so expensive for the medication and it's not something, you know, I can get from a provider, my insurance doesn't cover it, any of that kind of stuff. So, it is a total out of pocket expense, but we're growing for ourselves and we, we're at a point where we're self-sustainable." (Joe)

Being in Colorado, I Can Grow My Own

Popeye, who lives in Colorado, the first state to ever legalize recreational *Cannabis*, is able to produce his own.

Popeye stated:

"I would say more positively, umm. Being in Colorado in a state that I can grow my own, it's given me something to do, because with my condition I haven't worked for the last four years,

I've become disabled lots, I had to walk away from a 17-year career with the state of Colorado, because my health issues. Umm, I became really depressed, I didn't do much, I just sent around in a medical wool kind of. Now that I grow cannabis, it gives me an outlet. It gives me something to focus on, you know, it's so, I would say it's positively affected, us as far as me being depressed that way." (Popeye)

It's Definitely on My List

Stanley, who also lives in Michigan, stated that while it is legal for him to be able to grow, he is putting it off because of his current living situation.

Stanley said:

"I can possess up to ten plants per, uh, Michigan medical marijuana state law, so, it's definitely on my on my list. And we're actively looking for a farm right now to move. Umm. So, one of the first things I'm going to do when I get out to that farm is uh, put a couple of seeds to soil and see what comes of it." (Stanley)

Hope for the Future

The final theme that emerged from the data was hope for the future. This is an important theme because oftentimes not all SCDV's have hope for the future, and by helping them find purpose and reach their full potential, they will improve and have a more fulfilling life.

Finding Their Purpose Again

The only sub-theme that emerged from the data was in regard to helping SCDV's find their purpose again. The data that participants provided helped to illustrate how the use of MC can support these positive outcomes.

Military Veteran Potential

Stanley discussed his perception of military veterans and their capabilities, and his belief that MC can help many of the SCDV's reach their maximum potential.

Stanley said:

"Because I know military veterans are some of the most capable and driven human beings in our country. And uh, if we can just like, reset, kind of unlock that, well, you just need to take some CBN at night to get a good night's sleep, my friend. You know? Umm, think about what they could do the following day as far as umm, progressing in their life or meeting their goals, and what does that do to their mental health and their own personal well-being. Umm, finding their purpose again. Now, uhh, I've, I've seen some really good friends go down some really bad paths that, that really struggle with what we just talked about, and I think that if we're able to look at it from a medicinal standpoint and utilize this more effectively, umm, you know, we can unlock that, that military veteran potential that's there." (Stanley)

High Education Attainment

As discussed earlier, Joe pointed out how he earned his doctoral degree while using MC daily. Joe said: "I mean, I completed a Ph.D. using Cannabis daily! And it's like there's, there's no, there's no, limitation, to what it (MC) allows you to accomplish." (Joe)

Summary

The focus of this study was to explore the lived experiences of Service-Connected
Disabled Veterans (SCDV) and their families when navigating federal and Veterans Affairs
(VA) policies that are in conflict with state policies regarding the use of medical *Cannabis* (MC)
in lieu of traditional medications (TM). By using individual interviews, this study was able to
gather rich data regarding this population. In addition, the individual interviews utilized a set of

open-ended questions that were asked to each of the participants. The raw data were then coded to locate recurring themes and sub-themes. The investigators then created analyzer agreement regarding the final themes and sub-themes found within the data.

Through the analysis and coding of the individual interview transcripts, we were able to come to agreement regarding the findings of themes and sub-themes. The co-investigators identified five main themes and a total of fifteen sub-themes from within the data. The five main themes found within the data were: factors to initiate, medication stigmas, family effects, health and healthcare management, and hope for the future. Within each of these themes were sub-themes that were different from one another but fit together under one of the five main themes.

Chapter 5 - Discussion

This study sought a deeper understanding of the lived experiences of service-connected disabled veterans (SCDV's) and their families, where the SCDV utilized medical *Cannabis* (MC) instead of traditional medications (TM) to treat one or more service-connected disability (SCD). This research utilized individual interviews that were guided by a set of open-ended questions which were asked to each of the participants. The raw data were then individually coded by each of the co-investigators to locate recurring themes and sub-themes that emerged from the raw data. The co-investigators then discussed their findings in order to create analyzer agreement regarding the final themes and sub-themes found within the data. By utilizing qualitative research methods as the foundation of this study, I was able to gather full, rich data regarding the lived experiences of these families. The following sections discuss the interpretations of the findings from the previous chapter.

This study looked to answer the question, "What effect does MC have on SCDV's individually" and "family functioning from a human development and family science perspective." Research also examined how parents talk and communicate with their children, not only about the veterans' illnesses, but about them starting a cannabinoid regiment that could help increase both their physical and emotional wellbeing. This study planned to begin looking at some of these complex family relationships and how the use of MC, by a SCDV parent currently suffering from a SCD, affects those relationships not only between veteran and spouse, but also between parent and child.

Summary of the Findings

First, every SCDV had different factors that lead to their initiation to utilize MC in place of TM. This theme had four sub-themes that fell under the overarching theme of factors to

initiate, including internal factors, relational factors, systematic factors, and ability to choose healthcare. Each of the participating dyads experienced their own individual factors for the SCDV to initiate the use of MC, but each couple was impacted by their own factor leading to initiation.

Next, every SCDV or other members of their immediate family felt stigmas, regardless of what medical option the SCDV decided to adopt as part of their healthcare regiment. This includes stigmas aimed at the current and ongoing opioid crisis, not only within the VA but all healthcare facilities and providers across America, as well as stigmas about the use of MC.

Third, every SCDV and their family felt family effects that were experienced with the use of MC, which TM did not provide. All the families within my study experienced better quality of family time, better family dynamics, better engagement with the outside world for the SCDV, and expanded mental capacity. Any one of these by themselves would help improve outcomes for most families, but when taken all together the impact on family health is clear.

Fourth, every SCDV experienced differences not only in their health, but also in their healthcare management. Health issues ranging from pain and mental health management to healthcare trade-offs that each participant had to make in order to utilize MC, were only some of the differences experienced by each participant. In addition, some of the participants also had adverse effects to MC, mainly with unknown strains that the SCDV was new to. Additionally, depending on which state the participant lived in, there were different rules regarding the use and production of MC that existed.

Lastly, most participants and their spouses/partners experienced hope for the future. This finding provides profound implications for other veterans and their families. Most importantly

was the finding that MC assisted some SCDV's in this study with attaining higher education goals, which they felt were out of reach while using TM.

Applying Guiding Theories

This study was based on two key theoretical foundations, both of which had strengths and limitations. The first, ecological systems theory, assisted this study by allowing us to examine multiple units of analysis, including the individual, the family, and the larger societal systems with which they interact. The second theoretical foundation, the contextual model of family stress, also assisted this study by allowing us to explore the processes of TM and MC in family stress.

Ecological Systems Theory

The key element to remember about ecological systems theory is that each system affects and is affected by all the other systems, which illustrates that not only are the individuals within the systems affected, but they also affect others within their systems (Bronfenbrenner, 1979, 1986, 1994). This theory was seen in action repeatedly throughout this study, affecting the lives of the SCDV's and their spouses/partners who took part in this study. So, by placing the SCDV and their family within micro-systems, it is clear to see that their VA practitioners are positioned in the exo-system, and the larger VA policies and federal laws fit within the macro-system, all of which are rooted within the chrono-system. All of these systems then affect one another through the meso-system, bringing the VA policies and federal laws to affect the VA practitioners who treat SCDV's, who in turn affect their families. This also happens in reverse, thereby allowing SCDV's and their families to affect VA policies and federal laws that then affect VA practitioners, but the impact the micro-system has on the exo-system or macro-system is less effective than in the opposite direction. That is unless many SCDV's and their families get

involved, then the impact they have together is stronger, and this can be related to changing social norms related to MC. These social norms often change over time, and this is the affect that the chrono-system can have on all the other systems.

Contextual Model of Family Stress

Recall that the contextual model of family stress (CMFS) is predicated on the axiom that all families experience stress, and that any family may reach levels of stress to the point of crisis, based on how the family perceives and attaches meaning to the stressor(s) (Boss, Bryant, & Mancini, 2017). Again, this theory was shown in action throughout this study, affecting the lives of the SCDV's and their spouses/partners who took part in this study. Many of the families that participated in this study demonstrated increased levels of stress, oftentimes due to the SCDV's use of TM. One family was even pushed to the breaking point and came close to dissolving through divorce, because of the side-effects associated with TM that the SCDV was using. This provided hope for these families by showing that even after being stressed to the point of crisis while using TM, these same families not only reorganized to previous levels of functioning, but frequently these families reorganized to a higher level of functioning than before when the SCDV starts using MC. Furthermore, not all the families within this study experienced a crisis event related to TM that stressed the family to hit rock bottom, but these families all experienced an event. Fortunately, none of the families within this study were stressed to the point of crisis, then reorganized to a lower level of functioning than before the crisis event.

Implications for Research

This study's findings have illuminated domains with serious implications for research to further our current knowledgebase and understanding of the lived experiences of SCDV and their spouses/partners choosing to utilize MC in place of TM. One of the most intriguing findings

emerging from these data were the experiences with higher educational attainment for SCDV's. This study further highlighted the implications MC can have on VA practitioners who are providing care for a SCDV. Additionally, this study exhibited the implications MC has on individuals of differing race, based on the geographical areas within America, which do not recognize the use of MC. In sum, this study identified opportunities emerging from these data that could be operationalized and studied in future quantitative or mixed methods research.

Educational Implications

Educational achievement emerged as a surprising theme in these analyses with four of the participants earning graduate degrees. Both SCDV's and their spouses/partners described in their own words that the SCDV tapped into different areas of their brains with the use of MC over TM, thereby allowing them to succeed in their academic pursuits. This study emphasized that while SCDV's were using TM, they felt locked away within themselves and were unable to achieve their academic goals. Yet, through starting to use MC, SCDV's were able to expand their mental capacity and concentrate on their academic studies. Research on the effects of MC on academic achievement in SCDV could provide profound implications for SCDV's who might wish to earn a degree but failed in the past while using TM. I urge you to think about the difference this could make in the lives of SCDV's who have failed academically in the past, who might now have an opportunity to succeed where they have failed, just by starting to use MC.

Practitioner Implications

Another key finding that emerged from this study had to deal with VA healthcare practitioners and the different implications that MC can have on them, both personally and professionally. The first implication for practitioners has to deal with educating and training for VA practitioners regarding the uses and benefits of MC. Unfortunately, until the federal

government changes the current U.S. drug enforcement agency's scheduling of *Cannabis* from schedule I to at least a schedule II, the VA, as a federal agency, cannot administer any such education or training, much less conduct any medical research with SCDV's and the use of MC. Furthermore, as this study has shown, some VA practitioners who are currently practicing at a Veterans Affairs Medical Center (VAMC) or a community-based outpatient clinic (CBOC) within a state that recognizes the use of MC, fail to follow VA house directives when treating SCDV's who are using MC due to personal reasons. This can cause undue stress to the SCDV, the VA practitioner, as well as the SCDV's family. This in turn can lead to a high turnover rate for VA practitioners, something both the SCDV's within the study experienced, as well as myself. I personally have had four different VA practitioners in the last four years, and some were supportive, and some were not, thereby causing undue stress with my medical relationship between myself and my provider. In addition, the high turnover rates with VA practitioners makes it extremely hard to develop and maintain a medical relationship, especially when you have to retell your entire medical history and all of the different treatments that have been tried throughout that history, every time there is a turnover with VA practitioners.

Racial Implications

Another key finding that materialized from this study that had implications regarding equal access to MC by SCDV's was grounded in the geographical and locality of VAMC and CBOC. Imagine the implications of living in a state that acknowledges the use of MC and participating in that states MC program, but the CBOC that you receive care from within the same state does not recognize the legal use of MC. Unfortunately, this happens more often than many people might think, mainly because the smaller CBOC that the SCDV receives care from within the state that legalizes MC, oftentimes falls under the neighboring states larger regional

VA healthcare system due to geographical location and distance, thereby impacting the level of their VA healthcare and benefits. Furthermore, this study exposed geographical disparities between states that have legalized MC and those that have not, that have racial implications. Additionally, the racial composition of the geographical regions of the South and Deep South are largely comprised of Black and Brown people, and since these states have failed to recognize the use of MC, racial disparities and equal access to MC exists.

Summary

The last implication for research that came out of this study was related to all the themes and sub-themes that were discovered from the raw data and the need to quantify and study them further. This can be accomplished by utilizing quantitative methods to further investigate the many themes that emerged during this study, thereby furthering our knowledgebase, and deepening our understanding of the lived experiences of being a SCDV or their spouse/partner, when the SCDV chooses to utilize MC in place of TM.

Implications for Practice

This study's findings also have valuable implications for current practices regarding SCDV's and their families and the daily struggles they endure when the SCDV chooses to utilize MC in place of TM. One of the more captivating implications for practice that this study emphasized regarded the ease of abuse that many SCDV's can have with TM, even more so when MC is not a legal medical option in their state. Furthermore, this study illustrated the implications that current VA healthcare is VA centered, and to become truly patient-centered, present-day VA policies need to change.

Substance Abuse Implications

Furthermore, this study showed that many SCDV's find themselves, oftentimes without any awareness at first, start abusing TM, specifically opioid pain medications and the implications this can have. Many SCDV's and their spouses/partners talked about their lived experiences in regard to how TM negatively affected their families. This study further exposed just how easy it was for SCDV's to just take a few pills followed by drinking some alcohol and how unsustainable that was in the long-term for the SCDV physically, as well as the impact it had on their family. Unfortunately, many SCDV's continue to follow their VA practitioner's treatment plan, which oftentimes includes TM, namely opioids. Couple and family therapists and other mental health counselors could benefit from trainings on how these medications affect SCDV's and help them choose MC in states that have a legal means to do so. Because many SCDVs live in states that do not recognize MC, their only treatment options for their SCDV's are TM, tragically leading many SCDV's to abuse TM. Practitioners' experiences with this could also inform advocacy efforts to adjust policy.

Healthcare Implications

The stunning lack of patient-centered care within the VA healthcare system emerged as troublesome for SCDV's and their families. One SCDV discussed how the TM he was taking for the treatment of his PTSD caused him to have no emotion. This affected his marriage to the point that his spouse felt like there was no emotional support, even when she came home with exciting news. This, and multiple reports from these veterans highlight the idea of the "one and numb" TM often prescribed by VA healthcare providers and the unseen emotional impact this approach imparts on relationships with SCDV. In addition, these same TMs may increase the anxiety and depression felt by the SCDV, further affecting their relationships. Unfortunately, current VA

policies do not allow for VA practitioners to recommend MC as a treatment option, even if current research supports the use of MC for many psychological conditions. This highlights the need for some VA practitioners to receive the education and training regarding MC, which currently lacks the will of decisionmakers. By doing this, the VA would move toward a more a patient-centered approach to healthcare, instead of the stock VA-centered approach, which currently mirrors federal policies regarding MC.

Implications for Policy

The findings from this study help to highlight that many of the current VA and federal policies have impacted the lives of SCDV's and their families. These findings have important implications for SCDV's currently using MC, the VA and federal policies creating fear and stress within themselves and their families. Two of the more fascinating implications for policy had to do with the fear of losing VA and other federal benefits. This fear affected not only the SCDV, but their families too, and caused some SCDV's to rely on TM for fear of using MC and being "caught" during drug screenings. Furthermore, this study emphasized the implications of current VA policies on SCDV's and their ability to enjoy equal access to MC that their civilian counterparts do. Finally, this study put a spotlight on the implications that recreational legalization of *Cannabis* can have on the medical community's acceptance of MC as a medicine.

VA Benefits Implications

The fear of losing much-needed VA benefits because the SCDV had decided to utilize MC emerged as one of the more important processes these families underwent. Almost every SCDV I spoke with during the recruitment phase of this study, even the ones who did not participate, disclosed some level of fear of losing benefits from the VA. Moreover, every SCDV and their spouse/partner within this study discussed the fear they endured in regard to losing

different federal and VA benefits. The benefits they feared losing most were their VA benefits, including medical and financial benefits, especially when many so desperately needed them at the time. This increases potential for many SCDV's to continue to use TM, even in the fear of losing their families due to side effects, because the fear of losing their VA benefits weighs just as heavily. Fortunately for some of these SCDV's, they explore MC as a treatment option, thereby trying to save their families, and the truly lucky ones also find a VA practitioner who supports their decision.

College Funding Implications

Another key finding from this study also held implications for benefits, but instead of VA benefits, federal funding for college emerged as important. Each year millions of college students complete and submit their free application for federal student aid, otherwise known as the FAFSA, and in doing so they agree to not use or sell narcotics, including Cannabis. If the student gets caught, they lose all eligibility for federal funding for two years. Additionally, some SCDV's within this study were fearful of losing federal funding while attending college, again due to the current regulations regarding the use of MC. It does not seem ethical that a SCDV could lose the ability to attend college because of lack of funding just because they choose to utilize MC in place of TM, especially because we know that their SCD's can negatively impact their academic progress. Furthermore, this study has provided some evidence that MC can, at least in this group, increase the likelihood of positive outcomes for some SCDV's attending or wishing to attend college. So, by forcing them to choose between federal funding for college or efficacious healthcare, we likely lead them down the road to academic failure. To address this, current federal policies require alteration to share current social norms regarding MC, as well as to conform to current state laws that recognize the use of MC.

Equal Access Implications

Another key finding with implications for many SCDV's, was the idea of equal access to MC as a healthcare option. Regrettably, this study has shown that even for SCDV's living in states that recognize MC, because of the limitations in their healthcare options, SCDV's are unable to ask their VA practitioner to sign or recommend MC. In addition, many pre-9/11 and post-9/11 SCDV's have carried a heavy load during their time in the military that their civilian counterparts have not, and yet they are the ones being denied equal access to MC. However, the fear of losing their benefits limits their ability to ask for MC.

Employment Implications

A key finding from this study, that oftentimes when a SCDV decides to begin using MC, the decision sometimes comes at a high price. Imagine choosing between losing your family or your job due to your choice of medication options. Imagine further your spouse and children begging you to stop using TM that were prescribed by the VA because they no longer held the ability to live with the severe mood swings. Additionally, envision them asking you to try MC, but knowing that by making that choice you could no longer work in your current profession due to regulations regarding MC within the industry. Fortunately for most of us, this choice, while being a hard one, is not difficult — many of us would make the same choice of family over career.

Recreational Implications

The last major implication for policy that this study highlighted was related to the growing number of states that have begun to legalize the recreational use of *Cannabis*, which begins to blur the lines between a medicine versus a recreational vice. This topic was addressed during the 2016 National Institutes of Health (NIH) symposium on MC, and my response was

that in Canada, you could buy Tylenol-Codeine #3 pills over the counter without a prescription, while in America, one was required. Unfortunately, the social acceptance of MC may start to become challenged, as more and more states recreationalize *Cannabis*, fewer and fewer practitioners may recognize it as a medicine. This could cause some to view MC like alcohol, causing them to alter their perspective, viewing it like a SCDV saying they were going to drink alcohol for their depression. Fortunately, this is currently not an issue and is not likely to become one soon, due to a limited number of states that currently legalize recreational *Cannabis*.

Recommendations for Future Research

This study has illuminated some recommendations for future research studies to build upon the findings of this study. This will allow future researchers to advance the current knowledgebase and understanding of the lived experiences of SCDV's and their spouses/partners when the SCDV chooses to utilize MC in place of TM.

The most salient recommendation for future research this study exposed applied to the hopes and goals of SCDV's to attain higher levels of education, but oftentimes failing due to the side-effects of TM. Future researchers need to explore in deeper detail the differences between SCDV's who finish a degree program, and those SCDV's who end up dropping out.

Understanding the extent to which differences between those SCDV's who use MC and the ones who use TM exist requires the attention of education, human development and family science, psychology, and other researchers.

The next recommendation for future research pertains to the implications MC might convey on VA practitioners providing care for a SCDV. I challenge future researchers with examining the effect that current laws and polices concerning MC might impart to VA practitioners working in states that recognize the use of MC. Unfortunately, because the various

federal and state laws surrounding MC are so convoluted at the present time, VA practitioners may find their personal values challenged. Future researchers must uncover the extent to which these practitioners support MC, and how this influences their interactions with SCDV's who choose to utilize MC.

Another recommendation for future research these veteran's stories identified relates to structural racism and inequitable access the current state and federal laws related to MC generate. Much of this is due to geographic locations of the South and Deep South, and the lack of recognition of *Cannabis* as a medicine. This lack of recognition of MC within these geographic regions should draw future researchers to the extent to which veterans of color are disproportionately affected by MC bans. Future researchers would be wise to recognize the lessons of the past (i.e., that prohibition was largely driven by racism), and identify the extent to which it still applies in veterans living in states prohibiting MC.

Lastly, this study revealed another avenue that future researchers should explore, which highlights the need for the themes and sub-themes to be quantified and further studied. This would allow future researchers to add additional context to the lived experiences of the SCDV's who chose to utilize MC in this study, and further understand the impact this decision places on their family. Additionally, these quantitative findings might have legislative implications that influencing future legislation regarding equal access to MC for all SCDV's.

Limitations

As with any research study, there are limitations within that study, and this study was no different. Luckily for most research studies, these limitations are not usually considered extreme enough to create a fatal flaw within the study. In addition, these limitations can even be addressed by future research studies that are designed to build upon the findings from previous

studies to add to and strengthen our knowledgebase and understanding of key findings from previous research. The main limitation of this study was the limited number of participants who took part in the study. To address this limitation, future research should look to expanding the number of participants within the study. By doing this, it would create more diversity among the participants and help to gain a deeper understanding of the lived experiences of SCDV's and their families, where the SCDV chooses to utilize MC instead of TM to treat one or more SCD.

Additionally, the participants represented only three out of more than thirty states that recognize the use of MC, thereby limiting national representation of this study. Again, future research can address this limitation by expanding recruitment of participants from a larger geographic region. This would allow future researchers to explore the impact geographic regions might have on the lived experiences of SCDV's and their families and the barriers that might reside within these various locations.

In addition, only two branches of the U.S. military were represented in this study, thereby limiting the effect that different branches of the military might have on implications of this study. By following the above recommendations of recruiting a larger number of participants from all the states that recognize MC, future researchers are more likely to capture SCDV's from each of the U.S. military branches, thereby strengthening their study and results.

Despite these limitations, this study also had some key strengths, which helped to enrich the data and the findings emerging from it. The main strength of this study is regarding the participants and the diversity each of them brought to this study. While this is listed as a limitation, it is also a strength for this study. First, the participant pool ranged in age from 30 years old to 66 years old, providing this study with data from SCDV's who served in different

eras. By having SCDV's who were enlisted decades apart, this study was able to collect data from both pre-9/11 and post- 9/11 SCDV's.

Participants who served with both the U.S. Army and the U.S. Navy strengthened this study, and again while this is listed as a limitation, it also serves as a strength for this study. By having more than one branch of U.S. military represented within this study, richer data were collected from participating SCDV's with different military experiences.

Another strength of this study includes the many different SCD's that were represented in this study, with almost no overlap of SCD's. Moreover, the SCDV's within this study also had a wide range of SCD's, ranging from chronic pain and inflammation to PTSD and many other SCD's in-between. This created robust data about the different SCD's, and the different TM used to treat each SCD, as well as exposing the adverse side-effects caused by the different TM. Furthermore, this highlighted the many different SCD's that MC can treat in place of TM and the positive family outcomes that are associated with MC.

Lastly, this study was strengthened by the research design and the data collection techniques used. By using individual interviews as the data gathering technique, I was able to collect rich data from each of the participants, without worry for any group bias. This also allowed each participant to fully explain the individual experiences they witnessed during the SCDVs transition from TM to MC, generating data that strengthened this study.

Conclusion

The study sought to explore the lived experiences of SCDV's and their families regarding the use of MC in lieu of TM by the veteran. What this study uncovered was so much more than for what the investigator was originally searching, but these additional findings bring hope for the future of SCDV's and their families.

The hope of attaining work and family-life balance while having better quality of time with family, or of being able to engage more with the outside world and getting outside to do more engaged activities were outcomes of using MC instead of TM. It could be difficult to imagine knowing that a higher likelihood exists of completing the program than dropping out. Furthermore, envision after having years of fog lifted, finally being able to express level, healthy emotions with family members and share in the priceless and precious moments creating life's rich pageant. Finally, picture feeling empowered by making decisions regarding healthcare and knowing that your practitioner is listening and making treatment decisions from a patient-centered vantage point.

Fortunately, all of this is possible for SCDV's suffering from one or more of the top-ten SCD's who have tried TM and are open to exploring MC as a treatment option. This study fully recognizes that MC is not a treatment option for every SCDV but believes that it should be the SCDV's choice and not their VA practitioner's. Moreover, this study has shown that for these SCDV's who were willing and able to begin using MC, the benefits oftentimes far outweighed the drawbacks associated with MC. This can become a life-altering change with positive effects upon the entire family, sometimes even saving the family from divorce. Therefore, the findings from this research rise to importance and need further investigation, because of the profound impact MC can have on the lives of SCDV's and their families.

References

- Agrawal, A., Pergadia, M. L., & Lynskey, M. T. (2008). Is there evidence for symptoms of *Cannabis* withdrawal in the national epidemiologic survey of alcohol and related conditions? *American Journal on Addictions*, 17(3), 199–208. doi: 10.1080/10550490802019519
- Allsop, D. J., Norberg, M. M., Copeland, J., Fu, S., & Budney, A. J. (2011). The *Cannabis* withdrawal scale development: Patterns and predictors of *Cannabis* withdrawal and distress. *Drug and Alcohol Dependence*, *119*(2011), 123–129. doi: 10.1016/j.drugalcdep.2011.06.003
- Altalib, H. H., Fenton, B. T., Sico, J., Goulet, J. L., Bathulapalli, H., Mohammad, A., Kulas, J., Driscoll, M., Dziura, J., Mattocks, K., Kerns, R., Brandt, C. & Haskell, S. (2016).

 Increase in migraine diagnoses and guideline-concordant treatment in veterans, 2004–2012. *Cephalalgia*, 37(1), 3–10. doi: 10.1177/0333102416631959
- American College of Physicians (2008). Supporting research into the therapeutic role of marijuana. *Philadelphia: American College of Physicians; 2008: Position Paper*.

 (Available from American College of Physicians, 190 N. Independence Mall West, Philadelphia, PA 19106.)
- Bagalman, E. (2014). The number of veterans that use VA health care services: A fact sheet. *Congressional Research Service*, (7-5700, R43579), 1–4. <u>www.crs.gov</u>
- Baron, E. P. (2018). Medicinal properties of cannabinoids, terpenes, and flavonoids in *Cannabis*, and benefits in migraine, headache, and pain: An update on current evidence and *Cannabis* science. *Headache: The Journal of Head and Face Pain*, 58(7), 1139–1186. doi: 10.1111/head.13345

- Baron, E. P., Lucas, P., Eades, J., & Hogue, O. (2018). Patterns of medicinal *Cannabis* use, strain analysis, and substitution effect among patients with migraine, headache, arthritis, and chronic pain in a medicinal *Cannabis* cohort. *The Journal of Headache and Pain*, 19(1), 1-28. doi: 10.1186/s10194-018-0862-2
- Blumenfeld, A. M., Varon, S. F., Wilcox, T. K., Buse, D. C., Kawata, A. K., Manack, A., Goadsby, P.J., & Lipton, R. B. (2010). Disability, HRQoL and resource use among chronic and episodic migraineurs: Results from the international burden of migraine study (IBMS). *Cephalalgia*, 31(3), 301–315. doi: 10.1177/0333102410381145
- Bolkan, C. R., Bonner, L. M., Campbell, D. G., Lanto, A., Zivin, K., Chaney, E., & Rubenstein,
 L. V. (2013). Family involvement, medication adherence, and depression outcomes
 among patients in Veterans Affairs primary care. *Psychiatric Services*, 64(5), 472–478.
 doi: 10.1176/appi.ps.201200160
- Bonn-Miller, M. O., Babson, K. A., & Vandrey, R. (2014). Using *Cannabis* to help you sleep: Heightened frequency of medical *Cannabis* use among those with PTSD. *Drug and Alcohol Dependence*, *136*, 162–165. doi: 10.1016/j.drugalcdep.2013.12.008
- Bonn-Miller, M. O., Vujanovic, A. A., & Drescher, K. D. (2011). *Cannabis* use among military veterans after residential treatment for posttraumatic stress disorder. *Psychology of Addictive Behaviors*, 25(3), 485–491. doi: 10.1037/a0021945
- Bonn-Miller, M. O., Vujanovic, A. A., Twohig, M. P., Medina, J. L., & Huggins, J. L. (2010).

 Posttraumatic stress symptom severity and marijuana use coping motives: A test of the mediating role of non-judgmental acceptance within a trauma-exposed community sample. *Mindfulness*, 1(2), 98–106. doi: 10.1007/s12671-010-0013-6

- Boss, P., Bryant, C. M., & Mancini, J. A. (2017). *Family stress management*. Los Angeles: SAGE.
- Brock, R. L., & Lawrence, E. (2008). A longitudinal investigation of stress spillover in marriage:

 Does spousal support adequacy buffer the effects? *Journal of Family Psychology*, 22(1),
 11–20. doi: 10.1037/0893-3200.22.1.11
- Bronfenbrenner, U. (1979). *Ecology of human development: Experiments by nature and design*.

 Cambridge: Harvard University Press.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723–742. doi: 10.1037/0012-1649.22.6.723
- Bronfenbrenner, U. (1994). Ecological models of human development. In international encyclopedia of education, (2nd. Ed., Vol. 3) Oxford: Elsevier.
- Brooks, E. (2016). Marijuana in La Guardia's New York City: The mayor's committee and federal policy, 1938–1945. *Journal of Policy History*, 28(4), 568–596. doi: 10.1017/s0898030616000269
- Bryant, L. M., Daniels, K. E., Cognetti, D. M., Tassone, P., Luginbuhl, A. J., & Curry, J. M. (2018). Therapeutic *Cannabis* and endocannabinoid signaling system modulator use in otolaryngology patients. *Laryngoscope Investigative Otolaryngology*, *3*(3), 169–177. doi: 10.1002/lio2.154
- Buse, D. C., Powers, S. W., Gelfand, A. A., Vanderpluym, J. H., Fanning, K. M., Reed, M. L., Adams, A.M., & Lipton, R. B. (2018). Adolescent perspectives on the burden of a parent's migraine: Results from the CaMEO study. *Headache: The Journal of Head and Face Pain*, 58(4), 512–524. doi: 10.1111/head.13254

- Ciccone, C. D. (2016). Medical marijuana: Just the beginning of a long, strange trip? *Physical Therapy*, 97(2), 239–248. doi: 10.2522/ptj.20160367
- Cincinnato, C. (2018, September 13). Medicinal *Cannabis* for migraine: A patient guide.

 Retrieved from https://migrainepal.com/medicinal-cannabis-for-migraine/.
- Cohen, P. J. (2006). Medical marijuana, compassionate use, and public policy: Expert opinion or vox populi? *Hastings Center Report*, *36*(3), 19–22. doi: 10.1353/hcr.2006.0037
- Colucci, D. A. (2019). Cannabis and hearing care. *The Hearing Journal*, 72(8), 43. doi: 10.1097/01.hj.0000579600.90915.75
- Cougle, J. R., Bonn-Miller, M. O., Vujanovic, A. A., Zvolensky, M. J., & Hawkins, K. A. (2011). Posttraumatic stress disorder and *Cannabis* use in a nationally representative sample. *Psychology of Addictive Behaviors*, 25(3), 554–558. doi: 10.1037/a0023076
- Creech, S. K., Hadley, W., & Borsari, B. (2014). The impact of military deployment and reintegration on children and parenting: A systematic review. *Professional Psychology:**Research and Practice, 45(6), 452–464. doi: 10.1037/a0035055
- Croxford, J. L., & Yamamura, T. (2005). Cannabinoids and the immune system: Potential for the treatment of inflammatory diseases? *Journal of Neuroimmunology*, 166(1-2), 3–18. doi: 10.1016/j.jneuroim.2005.04.023
- Dalton, D. S., Cruickshanks, K. J., Klein, B. E. K., Klein, R., Wiley, T. L., & Nondahl, D. M. (2003). The impact of hearing loss on quality of life in older adults. *The Gerontologist*, 43(5), 661–668. doi: 10.1093/geront/43.5.661
- Degenhardt, L., & Hall, W. D. (2008). The adverse effects of cannabinoids: Implications for use of medical marijuana. *Canadian Medical Association Journal*, 178(13), 1685–1686. doi: 10.1503/cmaj.080585

- Dekel, R., Goldblatt, H., Keidar, M., Solomon, Z., & Polliack, M. (2005). Being a wife of a veteran with posttraumatic stress disorder. *Family Relations*, *54*(1), 24–36. doi: 10.1111/j.0197-6664.2005.00003.x
- Di Marzo, V., Bifulco, M. D., & Petrocellis, L. (2004). The endocannabinoid system and its therapeutic exploitation. *Nature Reviews Drug Discovery*, *3*(9), 771–784. doi: 10.1038/nrd1495
- DoD Drug Policy Handbook. (2020). TECHNICAL PROCEDURES FOR THE MILITARY

 PERSONNEL DRUG ABUSE TESTING PROGRAM. Retrieves January 20, 2020.

 https://media.defense.gov/2018/Sep/06/2001962318/-1/-1/0/CIM_1000_10A.PDF
- Elliott, L., Golub, A., Bennett, A., & Guarino, H. (2015). PTSD and *Cannabis*-related coping among recent veterans in New York City. *Contemporary Drug Problems*, 42(1), 60–76. doi: 10.1177/0091450915570309
- Emery, P. C., Wilson, K. G., & Kowal, J. (2014). Major depressive disorder and sleep disturbance in patients with chronic pain. *Pain Research and Management*, 19(1), 35–41. doi: 10.1155/2014/480859
- Employment Situation of Veterans News Release (2019, March 21). Retrieved October 30, 2019, from https://www.bls.gov/news.release/vet.htm
- Fitzgibbon, M., Finn, D. P., & Roche, M. (2015). High times for painful blues: The endocannabinoid system in pain-depression comorbidity. *International Journal of Neuropsychopharmacology*, *19*(3). doi: 10.1093/ijnp/pyv095
- Friedberg, J. (2016). Medical *Cannabis*: Four patient perspectives. *Journal of Pain Management*, 9(4), 517-519. Retrieved from http://search.proquest.com.er.lib.k-state.edu/docview/1864051776?accountid=11789

- Galliher, J. F., & Walker, A. (1977). The puzzle of the social origins of the marihuana tax act of 1937. *Social Problems*, 24(3), 367–376. doi: 10.2307/800089
- Galovski, T., & Lyons, J. A. (2004). Psychological sequelae of combat violence: A review of the impact of PTSD on the veteran's family and possible interventions. *Aggression and Violent Behavior*, *9*(5), 477–501. doi: 10.1016/s1359-1789(03)00045-4
- Ghosh, S., Sheth, S., Sheehan, K., Mukherjea, D., Dhukhwa, A., Borse, V., Rybak, L.P., & Ramkumar, V. (2018). The endocannabinoid/cannabinoid receptor 2 system protects against cisplatin-induced hearing loss. *Frontiers in Cellular Neuroscience*, 12. doi: 10.3389/fncel.2018.00271
- Goedhart, H., Vesala, M., & Harrison, S. (2018). How tinnitus can affect your relationships, employment and social life. *Tinnitus Today*, 43(2), 56-61. Retrieved from https://www.ata.org/sites/default/files/Summer-2018-56.pdf
- Greer, G. R., Grob, C. S., & Halberstadt, A. L. (2014). PTSD symptom reports of patients evaluated for the New Mexico medical *Cannabis* program. *Journal of Psychoactive Drugs*, 46(1), 73–77. doi: 10.1080/02791072.2013.873843
- Hall, J. C., & Schiefelbein, J. (2011). The political economy of medical marijuana laws. *Atlantic Economic Journal*, 39(2), 197–198. doi: 10.1007/s11293-011-9266-2
- Harvard Health Publishing, (Sep. 2011). Tinnitus: Ringing in the ears and what to do about it.

 Retrieved from https://www.health.harvard.edu/diseases-and-conditions/tinnitus-ringing-in-the-ears-and-what-to-do-about-it.
- Henry, J. (2010). *How to manage your tinnitus: a step-by-step workbook*. San Diego, CA: Plural Publishing.

- Hickey, D., Carr, A., Dooley, B., Guerin, S., Butler, E., & Fitzpatrick, L. (2005). Family and marital profiles of couples in which one partner has depression or anxiety. *Journal of Marital and Family Therapy*, *31*(2), 171–182. doi: 10.1111/j.1752-0606.2005.tb01554.x
- Hoffmann, D. E., & Weber, E. (2010). Medical marijuana and the law. *New England Journal of Medicine*, 362(16), 1453–1457. doi: 10.1056/nejmp1000695
- Hohmann, A. G., Suplita, R. L., Bolton, N. M., Neely, M. H., Fegley, D., Mangieri, R., Krey,
 J.F., Walker, J.M., Holmes, P.V., Crystal, J.D., Duranti, A., Tontini, A., Mor, M., Tarzia,
 G., & Piomelli, D. (2005). An endocannabinoid mechanism for stress-induced analgesia.
 Nature, 435(7045), 1108–1112. doi: 10.1038/nature03658
- Huang, G., Kim, S., Muz, B., & Gasper, J. (2018). 2017 Survey of veteran enrollees' health and use of health care. *Data Findings Report*.
- Jeffreys, M. (2009). Clinician's guide to medications for PTSD. *National Center for PTSD. US*Department of Veterans Affairs. Retrieved from https://www.sidran.org/wp-content/uploads/2018/11/Clinician-Guide-to-Medications.pdf
- Kennedy, C. H. (2014, September 18). Off to see the wizard. *Navy Medicine Live: Official blog*of the U.S. Navy Bureau of Medicine and Surgery. Retrieved from

 https://navymedicine.navylive.dodlive.mil/archives/7079
- Kendall, C. J., & Rosenheck, R. (2008). Use of mental health services by veterans disabled by auditory disorders. *The Journal of Rehabilitation Research and Development*, 45(9), 1349–1360. doi: 10.1682/jrrd.2007.11.0185
- Kerns, R. D., Otis, J., Rosenberg, R., & Reid, C. M. (2003). Veterans reports of pain and associations with ratings of health, health-risk behaviors, affective distress, and use of the

- healthcare system. *The Journal of Rehabilitation Research and Development*, 40(5), 371–379. doi: 10.1682/jrrd.2003.09.0371
- Khaiser, M., Peng, M., Ahrari, S., Pasetka, M., & DeAngelis, C. (2016). Medical *Cannabis* dosing strategies in pain-related conditions: A scoping review of current literature.

 **Journal of Pain Management, 9(4), 449-463.
- Ko, G. D., Bober, S. L., Mindra, S., & Moreau, J. M. (2016). Medical *Cannabis*-the Canadian perspective. *Journal of Pain Research*, *9*, 735–744. doi: 10.2147/jpr.s98182
- Lee, M. A. (2010). The discovery of the endocannabinoid system. *The Prop*, 215. Retrieved from https://mattscbdoilreviews.com/wp-content/uploads/2019/02/eCBSystemLee.pdf
- Lee, S.E., Fonseca, V. P., Wolters, C. L., Dougherty, D. D., Peterson, M. R., Schneiderman, A. I., & Ishii, E. K. (2015). Health care utilization behavior of veterans who deployed to Afghanistan and Iraq. *Military Medicine*, 180(4), 374–379. doi: 10.7205/milmed-d-14-00250
- Leung, L. (2011). *Cannabis* and its derivatives: Review of medical use. *The Journal of the American Board of Family Medicine*, 24(4), 452–462. doi: 10.3122/jabfm.2011.04.100280
- Lewis, M., Lamson, A., & Leseuer, B. (2012). Health dynamics of military and veteran couples:

 A biopsychorelational overview. *Contemporary Family Therapy*, *34*(2), 259–276. doi: 10.1007/s10591-012-9193-7
- Lipton, R. B., Bigal, M. E., Kolodner, K., Stewart, W. F., Liberman, J. N., & Steiner, T. J. (2003). The family impact of migraine: Population-based studies in the USA and UK. *Cephalalgia*, 23(6), 429–440. doi: 10.1046/j.1468-2982.2003.00543.x

- Lipton, R. B., Buse, D. C., Adams, A. M., Varon, S. F., Fanning, K. M., & Reed, M. L. (2017). Family impact of migraine: Development of the impact of migraine on partners and adolescent children (IMPAC) scale. *Headache: The Journal of Head and Face Pain*, 57(4), 570–585. doi: 10.1111/head.13028
- Mackie, K. (2006). Cannabinoid receptors as therapeutic targets. *Annual Review of Pharmacology and Toxicology*, 46(1), 101–122. doi: 10.1146/annurev.pharmtox.46.120604.141254
- Magruder, K. M., Frueh, C. B., Knapp, R. G., Davis, L., Hamner, M. B., Martin, R. H., Gold, P.B., & Arana, G. W. (2005). Prevalence of posttraumatic stress disorder in Veterans Affairs primary care clinics. *General Hospital Psychiatry*, 27(3), 169–179. doi: 10.1016/j.genhosppsych.2004.11.001
- Maida, V., & Corban, J. (2017). Topical medical *Cannabis*: A new treatment for wound pain-three cases of pyoderma gangrenosum. *Journal of Pain and Symptom Management*, 54(5), 732–736. doi: 10.1016/j.jpainsymman.2017.06.005
- Martz, E., & Henry, J. A. (2016). Coping with tinnitus. *Journal of Rehabilitation Research and Development*, 53(6), 729–742. doi: 10.1682/jrrd.2015.09.0176
- Mechoulam, R., & Parker, L. A. (2013). The endocannabinoid system and the brain. *Annual Review of Psychology, 64*(1), 21–47. doi: 10.1146/annurev-psych-113011-143739
- Military Medicine (2014). Returning home from Iraq and Afghanistan: Assessment of readjustment needs of veterans, service members, and their families. *Military Medicine*, 179(10), 1053–1055. doi: 10.7205/milmed-d-14-00263
- Mott, J. M., Barrera, T. L., Hernandez, C., Graham, D. P., & Teng, E. J. (2014). Rates and predictors of referral for individual psychotherapy, group psychotherapy, and

- medications among Iraq and Afghanistan veterans with PTSD. *The Journal of Behavioral Health Services & Research*, 41(2), 99-109.
- Mouhamed, Y., Vishnyakov, A., Qorri, B., Sambi, M., Frank, S. M. S., Nowierski, C., Lamba,
 A., Bhatti, U., & Szewczuk, M. (2018). Therapeutic potential of medicinal marijuana: An educational primer for health care professionals. *Drug, Healthcare and Patient Safety*,
 10, 45–66. doi: 10.2147/dhps.s158592
- Myers, P. J., Griest, S., Kaelin, C., Legro, M. W., Schmidt, C. J., Zaugg, T. L., & Henry, J. A. (2014). Development of a progressive audiologic tinnitus management program for veterans with tinnitus. *Journal of Rehabilitation Research and Development*, *51*(4), 609–622. doi: 10.1682/jrrd.2013.08.0189
- National Center for Veterans Analysis and Statistics, 2019, Statistical Trends Veterans with a Service-Connected Disability, 1990 to 2018. Retrieved from https://www.va.gov/vetdata/docs/Quickfacts/SCD_trends_FINAL_2018.pdf
- Nicholl, B. I., Mackay, D., Cullen, B., Martin, D. J., Ul-Haq, Z., Mair, F. S., Evans, J., Mcintosh, A.M., Gallagher, J., Roberts, B., Deary, I.J., Pell, J.P., & Smith, D. J. (2014). Chronic multisite pain in major depression and bipolar disorder: Cross-sectional study of 149,611 participants in UK biobank. *BMC Psychiatry*, 14(1). doi: 10.1186/s12888-014-0350-4
- Patterson, J. M. (2002). Integrating family resilience and family stress theory. *Journal of Marriage and Family*, 64(2), 349–360. doi: 10.1111/j.1741-3737.2002.00349.x
- Patton, M. Q. (2002). *Qualitative research and evaluation methods, 3rd Ed.* Thousand Oaks, CA: Sage.
- Payne, K. A., Varon, S. F., Kawata, A. K., Yeomans, K., Wilcox, T. K., Manack, A., Buse, D.C., Lipton, R.B., Goadsby, P.J., & Blumenfeld, A. M. (2011). The international burden of

- migraine study (IBMS): Study design, methodology, and baseline cohort characteristics. *Cephalalgia*, *31*(10), 1116–1130. doi: 10.1177/0333102411410610
- Poole, H., White, S., Blake, C., Murphy, P., & Bramwell, R. (2009). Depression in chronic pain patients: Prevalence and measurement. *Pain Practice*, *9*(3), 173–180. doi: 10.1111/j.1533-2500.2009.00274.x
- ProCon.org (2022). 37 legal medical marijuana states and DC. Retrieved January 27, 2022, from https://medicalmarijuana.procon.org/view.resource.php?resourceID=000881
- Rácz, I., Nent, E., Erxlebe, E., & Zimmer, A. (2015). CB1 receptors modulate affective behaviour induced by neuropathic pain. *Brain Research Bulletin*, 114, 42–48. doi: 10.1016/j.brainresbull.2015.03.005
- Ray, S. L., & Vanstone, M. (2009). The impact of PTSD on veterans' family relationships: An interpretative phenomenological inquiry. *International Journal of Nursing Studies*, 46(6), 838–847. doi: 10.1016/j.ijnurstu.2009.01.002
- REPORT 3 OF THE COUNCIL ON SCIENCE AND PUBLIC HEALTH (I-09) Use of

 Cannabis for Medicinal Purposes (Resolutions 910, I-08; 921, I-08; and 229, A-09).

 Retrieved from

 https://drugwarfacts.org/cms/files/AMAReport_CouncilSciencePublicHealth.pdf
- Resnick, S. G., & Rosenheck, R. A. (2008). Posttraumatic stress disorder and employment in veterans participating in Veterans Health Administration Compensated Work Therapy. *Journal of Rehabilitation Research and Development*, 45(3), 427-436.
- Richardson, D., Pearson, R. G., Kurian, N., Latif, L. M., Garle, M. J., Barrett, D. A., Kendall, D.A, Scammell, B.E., Reeve, A.J., & Chapman, V. (2008). Characterisation of the

- cannabinoid receptor system in synovial tissue and fluid in patients with osteoarthritis and rheumatoid arthritis. *Arthritis Research & Therapy*, *10*(2), 1–14. doi: 10.1186/ar2401
- Riedl, D., Rumpold, G., Schmidt, A., Zorowka, P.G., Bliem, H.R., & Moschen, R. (2015). The influence of tinnitus acceptance on the quality of life and psychological distress in patients with chronic tinnitus. *Noise and Health*, 17(78), 374–381. doi: 10.4103/1463-1741.165068
- Salsitz, E. A. (2015). Chronic pain, chronic opioid addiction: A complex nexus. *Journal of Medical Toxicology*, 12(1), 54–57. doi: 10.1007/s13181-015-0521-9
- Seng, E. K., Mauser, E. D., Marzouk, M., Patel, Z. S., Rosen, N., & Buse, D. C. (2018). When mom has migraine: An observational study of the impact of parental migraine on adolescent children. *Headache: The Journal of Head and Face Pain*, 59(2), 224–234. doi: 10.1111/head.13433
- Simiola, V., Neilson, E.C., Thompson, R., & Cook, J.M. (2015). Preferences for trauma treatment: A systematic review of the empirical iterator. *Psychological Trauma*, 7, 516-524.
- Smith, P. F., & Zheng, Y. (2016). Cannabinoids, cannabinoid receptors and tinnitus. *Hearing Research*, 332, 210–216. doi: 10.1016/j.heares.2015.09.014
- Sullum, J. (2017). Reefer madness at the New York Times. *Reason.com Free Minds and Free Markets*. Retrieved from https://reason.com/2017/07/22/reefer-madness-at-the-new-york/
- Tambaro, S., & Bortolato, M. (2012). Cannabinoid-related agents in the treatment of anxiety disorders: current knowledge and future perspectives. *Recent patents on CNS drug discovery*, 7(1), 25–40.

- Thayer, R. L. (2019, April 30). VA opposes new legislation aimed at improving access to medical marijuana for veterans. *Stars and Stripes*. Retrieved from https://www.stripes.com/news/us/va-opposes-new-legislation-aimed-at-improving-access-to-medical-marijuana-for-veterans-1.579137
- Thomas, J. (2010, January). The past, present, and future of medical marijuana in the United States. *Psychiatric Times*, 27(1), 1. Retrieved from https://link-gale-com.er.lib.k-state.edu/apps/doc/A218449804/AONE?u=ksu&sid=AONE&xid=78e06e88
- US Census 2017, veterans in US. Retrieved from

https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

US Census Bureau, SC disability rates, 2017. Retrieved from

https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

US Department of Veterans Affairs, & Veterans Health Administration. (2017, February 9).

VA.gov: Veterans Affairs. Retrieved from

https://www.publichealth.va.gov/marijuana.asp.

- US Department of Veterans Affairs, Compensation Data, 2018. Retrieved from https://www.benefits.va.gov/REPORTS/abr/docs/2018-compensation.pdf
- VA Clinician's Guide, 2017, Transforming the Treatment of Chronic Pain Moving Beyond Opioids. Retrieved from

https://www.pbm.va.gov/PBM/AcademicDetailingService/Documents/Academic_Detailing_ng_Educational_Material_Catalog/Pain_ChronicPainProviderEducationalGuide_IB10100_0.pdf

- VA July, 2013, Tinnitus Fact Sheet, Tinnitus Ver3.0. Retrieved from

 https://www.mirecc.va.gov/cih-

 visn2/Documents/Patient_Education_Handouts/Tinnitus_Fact_Sheet_Version_3.pdf
- VA research on Pain Management, 2018. Retrieved from https://www.research.va.gov/pubs/docs/va_factsheets/Pain.pdf
- Vesterager, V. (1997). Fortnightly review: Tinnitus investigation and management. *Bmj*, 314(7082), 728–728. doi: 10.1136/bmj.314.7082.728
- Wang, 2019, 2018 Survey of Veteran Enrollees' Health and Use of Health Care. Retrieved from https://www.va.gov/VHASTRATEGY/SOE2021/2021 Enrollee Data Findings Report-508 Compliant.pdf
- Wang, S.-J., Wang, P.-J., Fuh, J.-L., Peng, K.-P., & Ng, K. (2012). Comparisons of disability, quality of life, and resource use between chronic and episodic migraineurs: A clinic-based study in Taiwan. *Cephalalgia*, *33*(3), 171–181. doi: 10.1177/0333102412468668
- Warchal, J. R., West, P. L., Graham, L. B., Gerke, S. B., & Warchal, A. J. (2011). Families in crisis: When the veteran returns home. Retrieved from http://counselingoutfitters.com/vistas/vistas11/Article_16.pdf
- Weaver, T. L., Walter, K. H., Chard, K. M., & Bosch, J. (2014). Residual injury, appearance-related concerns, symptoms of post-traumatic stress disorder, and depression within a treatment-seeking veteran sample. *Military Medicine*, 179(10), 1067–1071. doi: 10.7205/milmed-d-13-00414
- Whisman, M. A., Uebelacker, L. A., & Settles, T. D. (2010). Marital distress and the metabolic syndrome: Linking social functioning with physical health. *Journal of Family Psychology*, 24(3), 367–370. doi: 10.1037/a0019547

- Woodhams, S. G., Chapman, V., Finn, D. P., Hohmann, A. G., & Neugebauer, V. (2017). The cannabinoid system and pain. *Neuropharmacology*, *124*, 105–120. doi: 10.1016/j.neuropharm.2017.06.015
- Wu, L., & Lewis, M. W. (2015). Disabilities among veterans and their utilization of health care.
 Health Psychology and Behavioral Medicine, 3(1), 296–314. doi:
 10.1080/21642850.2015.1089176
- Zheng, Y., Reid, P., & Smith, P. F. (2015). Cannabinoid CB1 receptor agonists do not decrease, but may increase acoustic trauma-induced tinnitus in rats. *Frontiers in Neurology*, 6(60). doi: 10.3389/fneur.2015.00060
- Ziolkowski, N., Kitto, S. C., Jeong, D., Zuccaro, J., Adams-Webber, T., Miroshnychenko, A., & Fish, J. S. (2019). Psychosocial and quality of life impact of scars in the surgical, traumatic and burn populations: A scoping review protocol. *BMJ Open*, *9*(6), 1–6. doi: 10.1136/bmjopen-2017-021289
- Zou, S., & Kumar, U. (2018). Cannabinoid receptors and the endocannabinoid system: Signaling and function in the central nervous system. *International Journal of Molecular Sciences*, 19(3), 1–23. doi: 10.3390/ijms19030833

Appendix A - Criteria for Sample

- 1. Are you a service-connected disabled veteran?
- 2. Without self-identifying which disability you have, are you currently being treated for one, or more of the VA's top ten service-connected disabilities (SCD)
- 3. Have you utilized traditional medications (TM) for the treatment of your SCD in the past?
- 4. Again, without self-identifying which TM you might use, are you currently using any TM?
- 5. Are you currently using medical Cannabis (MC)?
- 6. Are you using MC for the treatment of your SCD?
- a. What type of MC products do you use?
- 7. Have you discussed your MC used with your VA healthcare provider?
- 8. Are you currently married?
- 9. Was your current spouse present in your life when you started seeking VA healthcare for your SCD?
- 10. Was your current spouse present in your life when you utilized TM?
- 11. Was your current spouse present in your life when you begin utilizing MC?

Appendix B - VA Pain Contract

VA/DoD Clinical Practice Guideline Opioid Therapy Chronic Pain Sample Opioid Pain Care Agreement

- 1. I understand that my provider and I will work together to find the most appropriate treatment for my chronic pain. I understand the goals of treatment are not to eliminate pain, but to partially relieve my pain in order to improve my ability to function. Chronic opioid therapy is only ONE part of my overall pain management plan.
- 2. I understand that my provider and I will continually evaluate the effect of opioids on achieving the treatment goals and make changes as needed. I agree to take the medication at the dose and frequency prescribed by my provider. I agree not to increase the dose of opioids on my own and understand that doing so may lead to the treatment with opioids being stopped.
- 3. I understand that the common adverse effects of opioid therapy include constipation, nausea, sweating, and itchiness of the skin. Drowsiness may occur when starting opioid therapy or when increasing the dosage. I agree to refrain from driving a motor vehicle or operating dangerous machinery until such drowsiness disappears.
- 4. I will not seek opioid medications from another physician for the treatment of my chronic pain. Regular follow-up care is required and only my provider will prescribe these medications for my chronic pain for me at scheduled appointments.
- 5. I will attend all appointments, treatments, and consultations as requested by my providers. I will attend all pain appointments and follow pain management recommendations.
- 6. I will not give or sell my medication to anyone else, including family members; nor will I accept any opioid medication from anyone else. I agree to be responsible for the secure storage of my medication at all times. If these medications are stolen, I will report this to police and my provider and will produce a police report of this event if requested to do so.
- 7. I understand that if my prescription runs out early for any reason (for example, if I lose the medication or take more than prescribed), my provider may not prescribe extra medication for me. I may have to wait until the next prescription is due.
- 8. I understand that the use of other medications can cause adverse effects or interfere with opioid therapy. Therefore, I agree to notify my provider of the use of all substances, including marijuana, alcohol, medications not prescribed for me (tranquilizers), and all illicit drugs.
- 9. I agree to periodic unscheduled drug screens.
- 10. I understand that I may become physically dependent on opioid medications, which in a small number of patients may lead to addiction. I agree that if necessary, I will permit referral to addiction specialists as a condition of my treatment plan.
- 11. I understand that my failure to meet these requirements may result in my provider choosing to stop writing opioid prescriptions for me. Withdrawal from the medications will be coordinated by the provider and may require specialist referrals.
- 12. I hereby agree that my provider has the authority to discuss my pain management with other health care professionals and my family members when it is deemed medically necessary in the provider's judgment.
- 13. My providers may obtain information from State controlled substances databases and other prescription monitoring programs.

🔼 Department of Veterans Affairs	Consent for Long-Term Opioi	d Therapy for Pain
	A. IDENTIFICATION	
Patient Name, Social Security Number, and Date of	f Birth:	
Name: Last, First, Middle	Social Security Number	Date of Birth
2. Decision-making capacity:		
The patient HAS decision-making capacity (skip to it	em 3).	
The patient DOES NOT HAVE decision-making capa not established or available, refer to Handbook 1004		the patient. (If the patient's surrogate is
Name: Last, First, Middle	Relationship	
3. Name of the treatment: Long-Term Opioid Therapy	<u> </u>	
4. Practitioner obtaining consent:	•	
Name: Last, First, Middle		
5. Supervising practitioner: (if applicable)		
Name: Last, First, Middle		
6. Additional practitioner(s) performing or supervisir	ng the treatment: (if not listed above)	
	,	
B. INFO	RMATION ABOUT THE TREATMENT	
7. Reason for long-term opioid therapy (diagnosis, c	ondition, or indication):	
8. Location of pain:		
9. Goal(s) of long-term opioid therapy (e.g., pain sco	re, functional abilities such as go back to we	ork, climb stairs, walk short
distances, sleep through the night, do daily househo	old chores, start a light exercise program):	
10. Name of current or initial opioid medication(s):		
10. Name of current or initial opioid medication(s):		
10. Name of current or initial opioid medication(s):		
10. Name of current or initial opioid medication(s):		
10. Name of current or initial opioid medication(s):		

VA FORM 10-0431C

11. Brief description of the treatment.

Opicids are very strong medicines that may be used to trest pain. You may sheedy be taking opicids. Or your provider may by to give you opicids to find out if they will help you. They may by then for a short time or continue them for the rest of your life. Your provider will learn more about your risks and side effects when you are trying the opicids. If the risks and side effects outweigh the benefits, your provider will also the orespiction.

If your provider continues your opicid prescription, the goals of your treatment may change over time. The names and doses of your opicids, may also change. You will not need to sign another consent form for these changes. You may be asked to sign another consent form if you seek coloid pain gave from another VA provider.

Your provider will monitor your prescription. This may include checking how often you refill and renew your prescription, counting pills, asking you about your symptoms, and testing your urine, salive, and blood. If you do not take opicids responsibly, your provider may stop your prescription. For example, if you do not let your provider monitor how you are responding to the opicids or tell them if you are taking other drugs that may affect the safety or effectiveness of your opicid treatment, your provider may stop the prescription.

For your safety, your provider and pharmacist will monitor when you renew and refill your opicids within VA. Consistent with state law, they will also monitor this outside of VA. Most states have monitoring programs that track unsafe patterns of preoxiption drug use. VA and these programs may obtain and share information about your expeditio consent.

Your provider will review with you a Patient information Guide called "Taking Opicide Responsibly" to make sure that you know how to take your medication safety. You will be given a copy of the guide so that you can use it as a reference

12 Reducted houselfly of the bandonest

Opicids — when added to other treatments as part of your pain care plan — may reduce your pain enough for you to feel better and do more. It is unlikely that opicids will eliminate your pain completely. It is possible that you may not receive any benefits from opicid therapy.

55. Marrier rights and side affects of the treatment:

Possible opioid side effects include:

- Steepiness or "slow thinking".
- Mental confusion, bed dreams, or hallucinations.
- Constitution
- Intestinal blockage
- Bolting
- Sweeting.
- Nauses or vombing.
- Decreased sex hormones
- Irregular or no menatrual periods.
- Degression
- Dry mouth that causes tooth decay
- Allergies.

Other risks of opioid therapy:

- Withdrawel symptoms if you auddenly stop taking opicids, lower the dose of your opicids too quickly, or take a drug that revenues the
 effects of your opicids. Withdrawel symptoms are caused by physical dependence that is a normal result of long-term opicid therapy.
 Some common withdrawel symptoms are rurnly nose, chills, body aches, diarries, sweating, nervousness, reuses, vomiting, mental
 distress, and trouble sieroing.
- Sleep agnes (abnormal breathing pauses during sleep)
- Wiomening of pain.
- Impaired driving or impaired ability to safely operate machinery
- Tolerance, which means that you may need a higher dose of opicid to get the same pain relief, resulting in an increase in the likelihood of the other side effects and risks.
- Addition (praving for a substance that gets out of control). Some patients become addited to opioids even when they take opioids as presorbed.
- Drug interactions (problems when drugs are taken together). Taking small amounts of alcohol, some over the counter medications, some herbal remedies, and other prescription medications can increase the chance of opicid side effects.
- Risks in pregnancy:
 - "Continued use of opioids during pregnancy can cause your baby to have withdraws symptoms after birth and require your baby to stay in the hospital longer after birth.
 - "Stopping opicids <u>auddenly</u> if you are pregnant and physically dependent on opicids can lead to complications during pregnancy." Studies have not shown a clear risk for birth defects with opicid use in pregnancy. If there is an increased risk for birth defects in pregnancy with opicid use, it is likely small.
- Death

器/機器 10-0431C

16. Alla	matives to the treatment:	
You have	e the option not to take opioids. Other treatments can be use	d as part of your pain care plan. Alternatives include:
- 10	est and cold therapy (heeting pads, ice packs)	 Self-care techniques
- 8	tretching	 Counseling and coaching
- 8	retite	- Meditation
- 9	eight loss	- Rehabilitation
	Assage	 Non-opioid pain medicines (Non-steroidal anti-inflammatory)
	agundare	druga, entidepressents, enticonvulsants)
	hiropredio	- Injections
	ene Strukton	 dipecialist pain care
	elauation or attess reduction training trained therapy	- Surgery - Pain classes
	constitute therapy	- Support orange
	ents heath treatment	- Attention to proper sleep
	Richal Informations	
10. 8000	Marian Information.	
İ		
M. Com		
	C. 100	NATURES
Programme	mer obtaining consent.	
	I relevant aspects of the treatment and its alternatives (includ	ing no treatment have been discussed with the patient
		cussion included the return, indications, benefits, risks, side effects,
	onitoring, and likelihood of success of each alternative that we	
		on document "Taking Opicids Responsibly" with the patient (or surrogate)
	he patient (or surrogate) demonstrated comprehension of the	
	have given the patient (or surrogate) an opportunity to ask que	
		sake any attempt to coerce the patient/surrogate to consent to this
	etnent	
	have offered the patient (or suntogate) the opportunity to nevie	wand receive a printed copy of the consent form. ve discussed the patient's prepriator status and prepriators intentions.
		used (or referred the patient for) contraceptive counseling.
	* If the patient is considering pregnancy. I have dispussed	for referred the patient for preconception governeing.
		<u></u>
September 1		Jace I the
	or surroughs	
	understand that to receive long-term opioids I must agree to m	
	omeone has explained the treatment, what it is for, and how it	
		erious side effects and death, particularly if I do not take my medicine as
	earibed.	
	omeone has told me about other treatments that might be don have discussed the information in the document "Taking Oxio	
	reve discussed the information in the occurrent "I sking Opio undentand the importance of	the sussifications, and talk broader.
- 11	*telling my provider about side effects.	
	William to the state of the sta	

- telling my provider about changes in my pain and daily function.
 petting my opicids from only my V/A provider and no one else.
 not giving every jor selling) my opicids to other people.
 storing my opicids in a safe place every from children, family, fitends, and pets.
 safely getting rid of opicids i do not need.

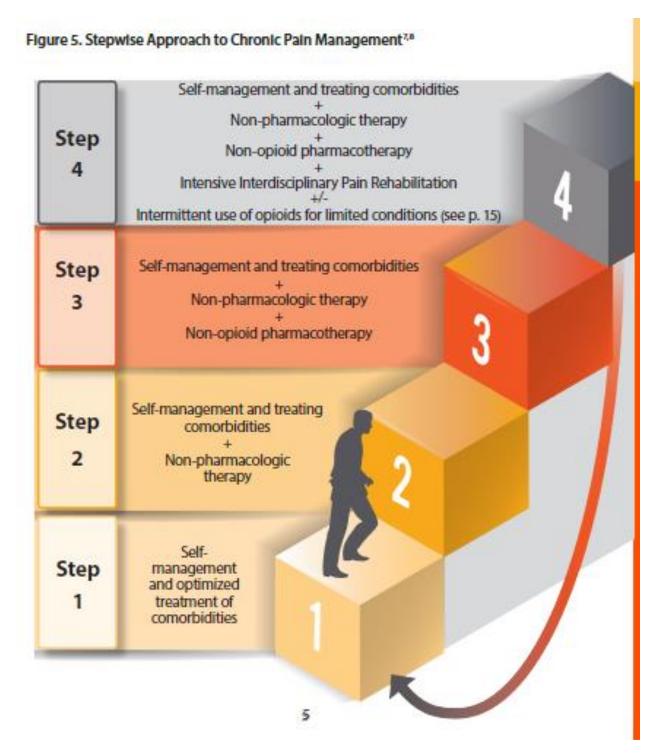
- not driving about or taking flegal street drugs when I am or opicids.
 for women, telling my provider if I think I might be pregnant, know I am pregnant, or am planning to become pregnant.

設/開業 10-0431C

 I plan to use my medications responsibly, and take them. I understand how to refil my opicid prescription or get a riversiends, holidays, and after require clinic hours. I undersplace doses that are lost or stolen. I understand that my provider may order urine or blood distract the results of these tests or my refusel to be tested in plan. I understand that I may have to stop opicids if my provide tiomeone has answered all my questions. Someone has answered all my questions. Someone has given me information about having treat any other VA benefits. I know I may refuse or drange my mind about having treat any other VA benefits. I have been offered the opportunity to review and receive I choose to have this treatment. 	new prescription. I understand that my instand that my provider might not give rug tests with my consent (separate to lary cause my provider to talk to me at it thinks that it is unsafe for me to con the clinic, if there is a problem and wi thment. If I do refuse or change my m	e me early medication refilis or on this consent). I understand bout changing my opioid treatment tinue.
Signature Witnesser: No witness is required if the patient or sunogate or signature is indicated with an "X" or some other identifying man		Time required only when the patients
Witness Name (Please Print)		
Vitness Signature	Date	Tine
Viltness Name (Please Print)		
Although Monatons	Plants.	Time.

勘/開 10-0431C

Appendix C - The Stepwise Approach to Pain Management



Appendix D - Recruitment Slips

Are you a Veteran, or do you know a Veteran who is currently using Medical *Cannabis*? Would you like to help bring about changes in current V.A. policies regarding Medical *Cannabis*?

Are you willing to spend 90 minutes talking about Medical *Cannabis* versus Traditional Medication with me? Hello, my name is Mark, and I am a doctoral student researching the impact of current V.A. policies related to Medical *Cannabis* on Veterans and their Families. I am excited to discuss this research project further with you, and should you wish to participate please contact me at L8985@ksu.edu.

Calling All Veterans

Are you a Veteran, or do you know a Veteran who is currently using Medical Cannabis? Would you like to help bring about changes in current V.A. policies regarding Medical Cannabis? Are you willing to spend 90 minutes talking about Medical Cannabis versus Traditional Medication with me? Hello, my name is Mark and I am a doctoral student researching the impact of current V.A. policies related to Medical Cannabis on Veterans and their Families. I am excited to discuss this research project further with you, and should you wish to participate please contact me at L8985@ksu.edu.

Appendix F - SCDV's Interview Questions

Interview Questions – Veterans

- 1. Please describe some of the negative effects caused by the traditional medications prescribed by the V.A.?
 - a. To what extent did these effect other family members?
- 2. Please describe some of the positive effects caused by the traditional medications prescribed by the V.A.?
 - a. To what extent did these effect other family members?
- 3. What were some of the key reasons that caused you to explore medical *Cannabis* as a treatment option?
- 4. To what extent did you involve or discuss your decision to utilize medical *Cannabis* as a treatment option with anyone in your household?
 - a. Why or why not?
- 5. To what extent did you involve or discuss your decision to utilize medical *Cannabis* as a treatment option with anyone on your V.A. medical team?
 - a. Why or why not?
- 6. Please describe some of the negative effects caused by the use of medical *Cannabis*?
 - a. To what extent did these effect other family members?
- 7. Please describe some of the positive effects caused by the use of medical *Cannabis*?
 - a. To what extent did these effect other family members?

8.	Has the use of medical <i>Cannabis</i> reduced the use, or amounts used, of traditional medications prescribed by the V.A.?
9.	Has the use of medical <i>Cannabis</i> impacted your treatment options from the V.A.?
	a. How?b. If not, why not?
10	Has the use of medical Canadhis impacted your traditional medication options from the

10. Has the use of medical *Cannabis* impacted your traditional medication options from the V.A.?

- a. How?
- b. If not, why not?

11. Has your use of medical Cannabis had any effects on the family?

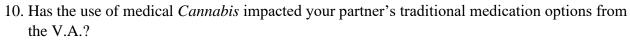
- a. What effects did this have on other family members?
- 12. Has your use of medical Cannabis had any effects on family resources?
 - a. What effects did this have on other family resources?
 - i. Time?
 - ii. Talent?
 - iii. Money?

Appendix G - Spouse/Partner Interview Questions

Interview Questions – Partners/Spouses

- 1. Please describe some of the negative effects caused by the traditional medications prescribed by the V.A.?
 - a. To what extent did these effect other family members?
- 2. Please describe some of the positive effects caused by the traditional medications prescribed by the V.A.?
 - a. To what extent did these effect other family members?
- 3. What were some of the key reasons that caused your partner to explore medical *Cannabis* as a treatment option?
- 4. To what extent did your partner involve or discuss his or her decision to utilize medical *Cannabis* as a treatment option with anyone in your household?
 - a. Why or why not?
- 5. To what extent did your partner involve or discuss their decision to utilize medical *Cannabis* as a treatment option with anyone on your V.A. medical team?
 - a. Why or why not?
- 6. Please describe some of the negative effects caused by the use of medical Cannabis?
 - a. To what extent did these effect other family members?
- 7. Please describe some of the positive effects caused by the use of medical *Cannabis*?
 - a. To what extent did these effect other family members?

8.	Has the use of medical <i>Cannabis</i> reduced the use, or amounts used, of traditional medications prescribed by the V.A.?
9.	Has the use of medical Cannabis impacted your partner's treatment options from the V.A.?
	a. How?
	b. If not, why not?



- a. How?
- b. If not, why not?
- 11. Has your partner's use of medical *Cannabis* had any effects on the family?
 - a. What effects did this have on other family members?
- 12. Has your partners use of medical Cannabis had any effects on family resources?
 - a. What did these effects have on other family resources?
 - i. Time?
 - ii. Talent?
 - iii. Money?