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## **Improvement for Veterans with Depression**

Kimbray McNeal

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**EMPA 396 Final Capstone Paper**

Kimbray McNeal

Golden Gate University

EMPA 3396 Graduate Research Project in Public Management

Dr. Alan Roper

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## ABSTRACT

After deployment to Iraq and Afghanistan, there was an increase from 11.4% to 15% of the number of military members diagnosed with depression (Inoue et al., 2021). This shows that efforts such as psychotherapy, medication management and supportive services, aimed at providing help to military veterans with depression are not working as effectively as anticipated. This study was conducted to identify the effectiveness of interventions aimed at helping military veterans dealing with depression, and to make recommendations on changes that might improve psychotherapy, medication management, and supportive services for military veterans dealing with Post-traumatic stress disorder (PTSD) and/or depression. Current literature describes the various interventions available for dealing with PTSD and depression among veterans, though not much has been written on the effectiveness of these interventions. The current study involved interviewing three subject matter experts, such as a psychiatrist and 2 psychologists. The current study also entailed a survey that was conducted to gather the opinions of veterans regarding the treatment, interventions and supportive services available to help them deal with depression. This research helped shed light on what is not working regarding psychotherapy, medication management, and supportive services that they receive from the VA in the fight against PTSD/depression.

## CHAPTER 1: INTRODUCTION

### Background of the Problem

The rate of depression among military veterans is on the rise, which shows that efforts aimed at providing help to veterans with depression are not working as effectively as anticipated. This study identified the changes that can be made to the interventions existing to help veterans dealing with depression, and to reduce the rates of suicide among the military veterans. After two decades of being at war in Afghanistan, a huge percentage of veterans with combat and deployment is presenting with mental health issues, with the rate of suicide among this population being on the rise. Providers have to take care of the visible wounds, together with the less visible ones, such as post-traumatic stress disorder, PTSD, acute stress disorder, and depression.

Depression is not usually accorded the same level of attention as PTSD, although it remains to be the leading mental health condition in the military. Studies show that 9% of all appointments in the ambulatory military health network are attributed to depression (Inoue et al., 2021). The military environment is suggested to lead to the development and progression of depression. This is because of how military life separates a soldier from loved ones and support systems, stressors of combat, seeing oneself and others being harmed, all which increase the risk of depression for active duty and veteran populations. After deployment to Iraq and Afghanistan, there was an increase from 11.4% to 15% of the number of military members diagnosed with depression (Inoue et al., 2021).

Some of the services and/or interventions that are existing for depression among military veteran populations include psychotherapy services, medication services, and supportive

services. First-line psychotherapy treatments include cognitive behavioural therapy, CBT, which is of two types; cognitive processing therapy and prolonged exposure therapy. Eye-movement desensitization and reprocessing, EMDR is another treatment method for PTSD that is gaining acceptance and is now recommended as an effective treatment for PTSD.

Psychotherapy services are sometimes combined with medication treatment using various anti-depressants, while the two methods are also sometimes used interchangeably as they provide the same efficacy for mild-moderate depression. Support services include helping veterans facing depression perform their day-day activities since such veterans usually have trouble remembering things or driving, which calls for help in doing groceries and driving. Other support services include VA mental services for PTSD, psychological effects of military sexual trauma, depression, grief, anxiety and other needs. Evidence shows that most widely disseminated trauma-focused interventions result in low remission rates. Studies conducted in the past do not indicate how effective psychotherapy, medication management, and supportive services are in dealing with PTSD/depression among military veterans.

There is a need for improvements on existing PTSD treatments, and developments and testing of novel evidence-based treatments, both trauma-focused and non-trauma focused. Suicide is significantly high in the veteran populations as evidenced by the rate of suicides among women veterans that stands at 35 per 100,000, a rate greater than that for civilians, (National Veteran Suicide Prevention Annual Report, 2021). Suicide prevention programs, such as community-based mental health treatment providers like Baltimore Crisis Response Inc. (BCRI) are not readily available in many VA Hospital and Health Systems due to an inadequate number of mental health staff and the lack of support in addressing crisis-intervention issues. Veterans returning from combat therefore lack the crucial crisis-intervention services. Access to

healthcare is also a challenge to most veterans since most are not signed for VA's Hospital and Health Systems.

The general problem of this research was the rise in the number military veterans with PTSD/depression and the lack of research on the effectiveness of interventions put in place. The negative effects of depression among this population are that the rate of suicide has increased in this population. The current study found that there is a need to improve on psychotherapy, medication management, and support services since the survey conducted on military veterans found that a considerable percentage of military veterans consider these VA services to be ineffective. Most studies do not seem to look at the effectiveness of the interventions aimed at lowering the rate of depression and suicide among this population, which necessitated the currying out of this study.

## **Statement of the Problem**

The specific problem that the research aimed to solve was the high rate of depression and suicide among the veteran population through improving PTSD/psychotherapy, medication management, and support services.

## **Purpose of the Study**

This study aimed at adding to the knowledge on the available interventions for fighting depression among military veterans, such as PTSD/psychotherapy, medication management, and support services. The study also evaluated the effectiveness of the interventions available for mitigating depression.



## **Significance of the Study**

This study is important to the field of public administration scholarship since it enlightens public administrators on the effectiveness of the interventions that have been put in place for the treatment of depression among military veterans. The study was important to the public since it provided recommendations on how the public can be involved in providing supportive services to military veterans experiencing PTSD and/or depression.

## **Research Question/Hypotheses**

Main question: What more can be done to help veterans dealing with depression?

Sub questions

Q1: Will improving PTSD/Psychotherapy help mitigate veteran depression?

Q2: How can medication management be enhanced to mitigate veteran depression?

Q3: What support services are needed or most valuable to mitigate veteran depression?

## **Theory of Change and Assumptions**

If PTSD/psychotherapy is improved,

If medication management is enhanced,

If support services are increased,

then, depression among military veterans would be mitigated.

## **Limitations**

Some of the limitations of this study included the causes of depression among veterans, homeless services, and substance/alcohol treatment.

**Definition of Terms**

The term "veteran" means a person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable.

**Expected Impact of the Research**

Findings from the research helped shed light on the effectiveness of interventions put in place against depression among military veterans. The current research also provided recommendations on what can be done to improve the mental health for military veterans.

## **CHAPTER 2: LITERATURE REVIEW**

### **Introduction**

The topic of this research was depression among military veterans which has been on the rise, and which can be attributed to the rise in the suicide rate among military veterans. The literature review was focused on what others have written on the topic of PTSD/depression and the effectiveness of the interventions put in place to improve the mental health of military veterans going through depression. Not many studies have been done on the effectiveness of the interventions, such as psychotherapy, medication and support services, which necessitated this study.

### **Effectiveness of PTSD/Psychotherapy Services for Veterans**

More veterans have been receiving healthcare services from the Department of Veteran Affairs since the Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) began in 2001, 2003, and 2010, respectively (National Academies of Sciences, Engineering, et al., 2018). These veterans seeking VA mental health services experienced mental health issues as a result of their military service during those operations. About 8.76 million veterans receive services from the VA (National Academies of Sciences, Engineering, et al., 2018).

The VA has set up some minimum requirements for eligibility of veterans into the healthcare services, such as being a prisoner of war, receiving VA pension, discharged due to a disability, among other criteria. Other barriers to VA service use includes lack of awareness on the availability of VA mental health services and one's eligibility of these services. According to Table 6-5, 16.4% of the veterans being surveyed were screened positive for major depression and

23.2% were screened positive for PTSD, among other mental health conditions (National Academies of Sciences, Engineering, et al., 2018). The veterans screened were those who have been receiving healthcare services through the Department of Veteran Affairs, VA since Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND). The results of the survey also showed that 5% of the veterans surveyed were alcohol-dependent, while 3% were abusing drugs (National Academies of Sciences, Engineering, et al., 2018). Another survey showed that 20% of veterans were screened positive for PTSD, 24% for major depression, and 27% for alcohol misuse (National Academies of Sciences, Engineering, et al., 2018).

In 2014, NIMH estimated that some 15.7 million adults (6.7% of all US adults) aged 18 or older in the United States had at least one major depressive episode in the past year (Office of Research and Development, 2021). In 2008, VA approximated that 1 in 3 Veterans seeking help in primary care clinics has some symptoms of depression; 1 in 5 has serious symptoms that indicate the need for further evaluation for major depression; and 1 in 8 to 10 has major depression, requiring treatment with psychotherapy or antidepressants. There was an increase from 11.4% to 15% of personnel diagnosed with depression after deployment to Iraq (Inoue et al., 2021). Veteran suicide is at an all-time high since annual deaths by suicide stand at over 6,000 per year (Inoue et al., 2021). PTSD is described as manifesting in psychological, emotional, physical, behavioral, and cognitive manners (Inoue et al., 2021). Military veterans are usually exposed to an array of traumatizing experiences, like witnessing severe injuries or violent death, and those treating them must look for symptoms of PTSD and depression to ensure the physical and psychological wellbeing of the veterans.

The average prevalence of depression among veterans peaked in 2011-2012 at 12.3% (Liu, 2018). There is also an overall increase in depression among female veterans since the rate is observed to have escalated from 9.0% in 2007-2008 to 14.8% in the 2015-2016 (Liu, 2018). This calls for effective strategies for treating depression among military veterans. The number of military veterans who died as a result of depression in 2018 stood at 6,4435 (Prevention Annual Report, n.d.). There is a 6-year strategic plan (S.P. 2.0) that has a national reach and focuses on the implementation of clinical and community-based prevention, intervention, and postvention services that reflect the National Strategy's four pillars.

### **Psychotherapy for Military-Related PTSD**

PTSD is rampant among military veterans, as seen in the 700,000 soldiers from the Vietnam war who need psychological care due to the delayed effects of combat exposure (Reisman, 2016). A study conducted on 60,000 Iraq and Afghanistan war veterans found that about 13.5% of deployed and non-deployed military veterans were experiencing PTSD (Reisman, 2016). Other studies reveal that the rate could be between 20%-30% (Reisman, 2016). Psychiatric comorbidity of PTSD has been indicated as to complicate the diagnosis and assessment of PTSD in military veterans. Depression has been identified as most common comorbidity of PTSD among military veterans. A large national survey revealed that major depressive disorder, MDD is three to four times more likely to be seen in veterans with PTSD than those without PTSD (Reisman, 2016). Other comorbidities of PTSD include anxiety, and substance abuse or dependence.

The utilization of psychological interventions is regarded as a first-line approach for PTSD by authoritative sources. These psychological treatments include cognitive behavioral therapy, CBT, which is of two types; cognitive processing therapy, CPT and prolonged exposure

(PE) therapy, and are recommended as first-line guidelines by the VA and the Department of Defense, DoD (Reisman, 2016). Eye-movement desensitization and reprocessing, EMDR is another treatment method for PTSD that is gaining acceptance and is now recommended as an effective treatment for PTSD, although was initially a controversial intervention.

Exposure therapies are meant to lower PTSD symptoms and problems associated with it (like depression, anger, and guilt) by assisting patients to confront their trauma-related situations, memories, and feelings (Committee on the Assessment of Ongoing Effects in the Treatment of Post-traumatic Stress Disorder, 2012). Exposure interventions consist of imaginal exposure, whereby the patient repeatedly revisiting the traumatic memory, and in vivo exposure, which encompasses confronting feared experiences that are objectively safe. Treatment programs that consist of both types of exposure, seem to have better outcomes than programs that include only one of the components.

Cognitive therapy, CT is a treatment intervention in which the therapist assists the patient identify and change the negative thoughts and beliefs that seem to cause pathologic emotions and behaviors. In PTSD treatment, this intervention takes an aim at thoughts and beliefs attributed to a traumatic experience (such as, survival guilt, self-blame for causing the trauma, feelings of personal inadequacy, or worries about the future) with the objective of changing them to lower PTSD symptoms and enhance mood and functioning (Committee on the Assessment of Ongoing Effects in the Treatment of Post-traumatic Stress Disorder, 2012). Several types of CT have received support for their efficacy from the research studies conducted. However, more studies are needed to match those conducted for exposure therapy.

Eye Movement Desensitization and Reprocessing, EMDR is a manualized intervention to help patients in gaining access to and processing traumatic memories, while bringing them to an

adaptive resolution (Committee on the Assessment of Ongoing Effects in the Treatment of Post-traumatic Stress Disorder, 2012). The patient is requested to access an image that is disturbing and linked with the traumatic event. The patient then solicits the experience of body sensations linked with the image, recognizes a negative self-referring belief, and recognizes a positive belief of their choosing to replace the negative belief. The patient then holds on to the disturbing image, sensations, and the negative belief or thought in mind while tracking the clinician's moving finger back and forth in front of his or her visual field for about 20 seconds. This process is repeated until the patient has no negative associations with the targeted image.

While four random control trials, RCTs found the method to be effective, an IOM committee that critically the RCTs for EMDR concluded that the evidence was inadequate to determine its efficacy for the treatment of PTSD. A study was conducted whose results affirm the effectiveness of EMDR therapy when offered in both weekly treatment format as well as the intensive 10-day format on an outpatient basis (Hurley 2018). Other therapies include interpersonal therapy which was found to have a recognizable reduction in PTSD symptoms, and group therapies which have an advantage over individualized therapy interventions since they have greater efficiency in the provision of treatment, and the social support that group members provide to each other. Other treatments include present-centered therapy that is based on a patient's current life and the manner in which they can cope with PTSD symptoms, and was found to lower PTSD significantly compared with no treatment and that fewer patients drop out of the program when compared to CBT; theta-burst transcranial magnetic stimulation which is a medical treatment that uses an electromagnetic coil to create a magnetic field that is applied to specific points on the skull to stimulate areas of the brain; and prazosin that is used to treat nightmares among veterans experiencing nightmares during sleep (Office of Research and

Development, Veterans, US Department of Veteran Affairs, 2021). The current study sought to identify the effectiveness of psychotherapy for military veterans experiencing PTSD/depression.

### **Medication Management of Depression among Veterans**

Most patients prefer psychotherapy over antidepressant medication. Mismatches between the treatment that patients prefer and the treatment type that patients receive seems to be common, and is linked to worse treatment adherence for psychotherapy (Leung, et al., 2021). It is therefore recommended that since psychotherapy and medication treatment for mild-moderate depression have roughly equivalent efficacy, patients should be provided with their preferred treatments when available (Leung, et al., 2021). To reduce the high rates of suicide among veterans, it is important that veterans suffering from depression visit healthcare service providers that offer mental health services that pay attention to mental health issues (Smith, et al., 2011). This study sought to understand how effective medication management was to military veterans experiencing PTSD/depression.

### **Support Services**

The military provides various support services for military personnel, such as confidential counsellors, primary care providers, and behavior healthcare providers (NAMI, n.d.). The National Alliance on Mental Illness, NAMI, offers information, support, and education, specifically for veterans, service members, and their family members. NAMI website also provides tips on how soldiers can help their fellow soldiers dealing with mental health issues, such as through talking to a counsellor or a medical officer.

A person can show support to a veteran's mental health through engaging in activities, such as understanding depression and donating one's time and money (Herrera-Yee, 2019).



Another way that we can support veterans fighting PTSD/depression is by helping them accomplish tasks that are difficult from day to day. An example of how one can do that is by taking them to the store to get items that they need if they are having trouble driving or memorizing things. One can also recommend helping resources and help with a mental health professional. VA provides several mental health support services for veterans, including psychotherapy talks, accessing VA services for depression, which begins with a veteran applying for VA healthcare (VA, 2020). The website also provides a link for accessing more information and support. The VA's website also details how one can schedule their first appointment, how to access their services online, and the BeThere peer assistance program (VA, 2021). The current study was conducted to offer insight into the effectiveness of the various supportive services that veterans receive from the VA whereby opinions from military veterans were collected through a survey.

## **Conclusion**

The literature review has showed that the rate of depression is high among military veterans. The literature has also showed that there are challenges to the availability and access to psychotherapy, medication, and support services that veterans experiencing depression need to improve their mental health. This study obtained the opinions of military veterans regarding the effectiveness of PTSD psychotherapy, medication management, and supportive services that they receive from the VA through an online survey. This study also obtained the opinions of key-experts (a psychologist and 2 psychotherapists) regarding psychotherapy for military veterans.

## CHAPTER 3: RESEARCH METHODS

### Introduction

This study involved the use of a mix of qualitative and quantitative data. Qualitative data consisted of interviews conducted with subject-matter experts. A survey was conducted on military veterans about their perception of the various services that they received from the VA, particularly psychotherapy, medication, and supportive services for PTSD/depression. Quantitative data involved measuring the effectiveness of the various treatment options available for military veterans experiencing depression, particularly psychotherapy, medication management, and support services.

### Research Questions and Sub-Questions

Main question: What more can be done to help veterans dealing with depression?

Sub questions

Q1: Will improving PTSD/Psychotherapy help mitigate veteran depression?

Q2: How can medication management be enhanced to mitigate veteran depression?

Q3: What support services are needed or most valuable to mitigate veteran depression?

### Theory of Change and Assumptions

If PTSD/psychotherapy is improved,

If medication management is enhanced,

If support services are increased,

then, depression among military veterans would be mitigated.

## **Operational Definitions**

Psychotherapy is improved – For the purposes of this study, “psychotherapy is improved” means an increased availability and access to various psychotherapy services that veterans can access to improve on their mental health.

Medication management is enhanced: For the purposes of this study, “medication management is enhanced” means expanded access to more effective medication for treating depression and which veterans can easily complete the dosage prescribed.

Support services are increased: For the purposes of this study, “support services are increased” means that more alternative means for showing support to veterans are utilized by the VA in partnership with local communities

Mitigation of depression among military veterans: For the purposes of this study, mitigation means better management of and/or the reduction in the rate of PTSD/depression among military veterans.

## **Population Sampling Strategy**

The interview participants included subject matter experts, who included a psychiatrist and 2 psychologists whose identity was kept confidential for the purpose of this study. They provided information on the best interventions that they consider to be effective for PTSD/depression and they also made recommendations on any improvements that can be made on existing interventions. Survey participants included military veterans in the country.

## **Procedure**

A psychiatrist and 2 psychologists were interviewed to gather their opinions on the existing interventions, particularly talk therapy and medication, currently available for military veterans

experiencing PTSD/depression. The interviews sought to identify the opinions of these mental health experts regarding the effectiveness of the interventions currently available for PTSD/depression among military veterans.

A survey was carried out on a sample of 107 American military veterans to obtain data from them on the services/treatments that they receive for depression from the VA. The survey was launched on Microsoft 365, an online platform for creating and launching surveys online. This survey gathered opinions of the veterans on how they perceive the effectiveness of the help that they receive from the VA and support groups/community organizations.

### **Data Processing and Analysis**

After collection of data, qualitative and quantitative analysis of the data from the interviews and the survey results will be done to obtain an understanding of the effectiveness of the interventions (talk therapy, medication management and supportive services) available to veterans for managing PTSD/depression among military veterans.

### **Internal and External Validity**

The findings of the study helped generalize on the effectiveness of PTSD/ psychotherapy, medication management, and supportive services available at the VA for fighting PTSD/depression among military veterans, and the improvements that can be made on those services.

### **Limitations**

The limitations of this study included the challenge of reaching out to military veterans on social media channels as some failed to complete the survey, although they had promised to.

## **Conclusions**

The research method used in this research was a mixed one as it included both qualitative and quantitative method. The qualitative method involved seeking the opinions of subject matter experts through interviews. The quantitative method involved finding the effectiveness of psychotherapy, medication management, and supportive services through the survey that was conducted on military veterans.

## CHAPTER 4: RESULTS AND FINDINGS

### Introduction

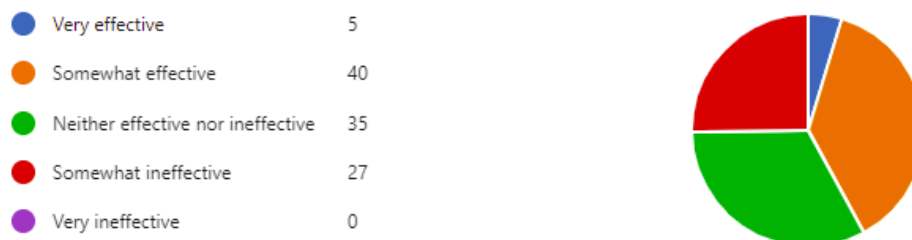
This chapter will provide the results of the research study conducted on the means through which PTSD/depression among military veterans can be mitigated. This was done through a survey that consisted of a list of 9 questions to the veterans in trying to confirm or dismiss the 3 theory of change assumptions for the study as analyzed in the sections below. There were 107 responses to the survey and three interviews with 1 psychiatrist and 2 psychologists. The survey responses were kept confidential while the interview responses were kept confidential.

#### **A1. If post-traumatic stress disorder (PTSD) is improved, then depression among military veterans will be mitigated:**

Survey results indicated that 50 (representing 47% of the survey participants) were somewhat satisfied with the services that they were receiving from Veterans Affairs, VA, for their mental health. Another 41% were neither satisfied nor dissatisfied with the services that they received from the VA, while 12% were somewhat dissatisfied. Of those who received psychotherapy (talk therapy), 5 (representing 5% of the survey participants) indicated that the talk therapy was very effective for their mental health condition; 40 (representing 37% of survey participants) indicated that the talk therapy was somewhat effective; 35 (representing 33%) found the talk therapy to be neither effective nor ineffective; while 27 (representing 25%) indicated that the talk therapy was somewhat ineffective; and none indicated that the talk therapy was very ineffective. Figure 1 below summarizes the responses for the question.

4. Did you receive psychotherapy (talk therapy)? If yes, how effective do you think it was for treating your condition?

[More Details](#)



*Figure 1*

These results showed that 37% of veterans find psychotherapy to be working for them, although a huge percentage (33%) were not sure whether talk therapy was working or not, while 25% of all participants indicated that psychotherapy was somewhat ineffective, which therefore might be used to confirm our theory of change assumption on the need to improve psychotherapy for PTSD/depression.

Research studies have been conducted on some of the psychotherapy techniques used to treat PTSD/depression. Several types of cognitive therapy (CT) techniques have received support for their efficacy through research studies conducted (Committee on the Assessment of Ongoing Effects in the Treatment of Post-traumatic Stress Disorder, 2012). The findings of the current research might therefore align with the literature obtained which indicates that more research is needed on the effectiveness of talk therapy.

Some of the veterans who participated in the survey provided some recommendations for improving PTSD and depression among veterans, including screening veterans for suicide risk, sending patients who are suicidal expressions of care and concern, and increasing the number of providers to make services more readily available. Literature used indicated that using imaginal

and in vivo exposure might provide better outcomes for veterans (Committee on the Assessment of Ongoing Effects in the Treatment of Post-traumatic Stress Disorder, 2012). This literature might therefore help improve on PTSD treatment, which veterans called for in the survey.

The interviews were conducted on three VA staff, and their responses were kept confidential since they were current employees. Pseudonyms were used to protect their identity. One of the interviewees was a psychiatrist named James. He stated that he considered cognitive behavioral therapy (CBT) to be the best psychotherapy technique when asked on the psychotherapy technique that he considered the most effective. Another interview was with a psychologist named Stacy. She was asked on what she considered to be the leading causes of mental health problems for military veterans and the best treatment options available for the mental health problems. In her response, she stated that trauma from events involving injuries, disabilities or even deaths associated with military service and substance abuse disorder, especially alcohol. She also described that she considered CBT to be the best technique for treating PTSD/depression as it is trauma-focused and the method has been found to be effective both in the short-term and in the long-term.

**A2: If medication management is enhanced, then PTSD/depression among military veterans might be mitigated.**

The fifth question was “Were you prescribed any medication? If yes, how effective do you think the medication was in treating your condition?” Of all veterans who participated in the survey, 2 (2%) indicated that medication provided was very effective; 37 (35%) indicated that medication provided was somewhat effective; 22 (21%) was neither effective nor ineffective; 43



(40%) indicated that medication was somewhat ineffective; 3 (3%) indicated that it was very ineffective. Figure 2 below shows a chart with the responses of the participants to the question.

5. Were you prescribed any medication? If yes, how effective do you think the medication was in treating your condition?

[More Details](#)

|                                   |    |
|-----------------------------------|----|
| Very effective                    | 2  |
| Somewhat effective                | 37 |
| Neither effective nor ineffective | 22 |
| Somewhat ineffective              | 43 |
| Very ineffective                  | 3  |



*Figure 2*

The second theory of change assumption was validated by the responses received from the veterans since 40% of those who took part in the survey indicated that medication provided was ineffective. These findings therefore meant that more effective medication needed to be availed to veterans to help them heal from PTSD/depression. Literature cited indicated that there were mismatches between the treatment that patients prefer and the treatment type that patients receive, which is a common occurrence that is linked to worse treatment adherence for psychotherapy (Leung, et al., 2021). The survey findings therefore aligned with literature used and revealed that more needed to be done to improve on PTSD/depression and overall mental health of veterans. Some of the recommendations that the veterans made regarding medication management included considering medical marijuana for PTSD/depression treatment, having more veterans' outreach centers, and getting younger doctors.

During the interview with James, the psychiatrist, he was asked on whether one could combine psychotherapy with medication for PTSD/depression treatment. James stated "Yes" and

continued to describe that he considered psychotherapy combined with medication to be very effective and that he used this combination for his patients. In the interview with Jane, the third psychologist, she was asked about her treatment methods for PTSD/depression. She stated that she first checks the behavior patterns of the patient, like sleeping patterns, then assesses panic attacks, if any, the thoughts that might be leading to certain sleeping patterns, and then helps the patient come up with new behaviors to deal with the abnormal sleep patterns. She stated that she cannot offer medication to her patients as this is beyond her scope of practice. However, she described that she helps patients develop behaviors that help with the condition and refers them to psychiatrist when indicated.

**A3: If support services are increased, then PTSD/depression among military veterans would be mitigated.**

The 6<sup>th</sup> question was “Have you received the following supportive services from the VA? Please select all that apply. Educational, Financial, Housing, Caregiver Support, Other. “The veterans who indicated that they received educational services were 8 (representing 26% of all participants); 22 participants (21%) indicated that they received financing services; 29 participants (27%) indicated that they received housing services; 26 participants (24%) indicated that they received caregiver support; while 2 participants (2%) indicated that they received other services. Figure 3 below provides a chart of the responses received regarding the supportive services received from the VA.

6. Have you received the following supportive services from the VA. Please select all that apply.

[More Details](#)

|                     |    |
|---------------------|----|
| ● Educational       | 28 |
| ● Financial         | 22 |
| ● Housing           | 29 |
| ● Caregiver support | 26 |
| ● Other             | 2  |



*Figure 3*

When asked about the effectiveness of the supportive services that they received from the VA in managing their mental health, 5 (representing 5% of the participants) of veterans indicated that they found the services to be very effective; 42 participants (representing 39% of all participants) indicated that the support services received were somewhat effective; 44 participants (representing 41% of all participants) indicated that the support services were neither effective nor ineffective, 16 (representing 15% of all participants) indicated that the support services were somewhat ineffective; while none of the participants indicated that the services were very ineffective. Figure 4 below shows the findings for the survey question.

7. If you selected supportive services in the previous question, how effective do you think they were in managing your mental health?

[More Details](#)

|                                   |    |
|-----------------------------------|----|
| Very effective                    | 5  |
| Somewhat effective                | 42 |
| Neither effective nor ineffective | 44 |
| Somewhat ineffective              | 16 |
| Very ineffective                  | 0  |



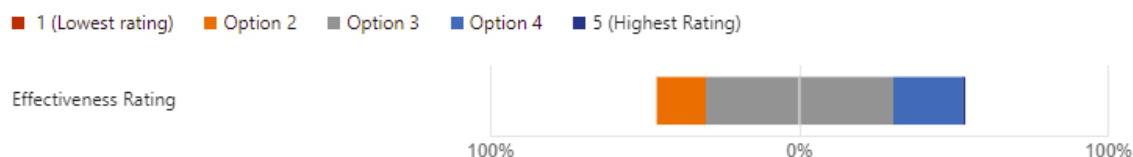
*Figure 4*

The above chart indicates that most veterans were not sure on the effectiveness of the support services that they received from the VA, which might validate our theory of change assumption.

On a Likert scale of 1-5 (with 1 indicating the lowest rating and 5 indicating the highest rating), 15.9% of the veterans who participated in the survey gave a 2; 60.7% gave a 3; 22.4% gave an effectiveness rating of 4; while 0.9% gave a rating of 5. The Likert scale in figure 5 below indicates that most people (60.7%) think that the supportive services that they receive from the VA are effective, and an improvement of the services might therefore result in an even greater rating of the effectiveness of the services. There are some (15.9%) veterans who gave a rating of 2 (the second-lowest rating), which is a significant number, and therefore shows that an improvement in supportive services would be necessary.

8. On a scale of 1-5, with one being not effective at all and 5 being very effective, how would you rate the effectiveness of the support services that you have been receiving from the VA?

[More Details](#)



*Figure 5*

This shows that support services have been somewhat effective in dealing with PTSD/depression among military veterans. However, since a significant percentage (41%) of veterans who completed the survey indicated that the services received were neither effective nor ineffective and 15% indicated that the support services they received were somewhat ineffective, there is a need to improve the supportive services provided to veterans. Literature cited failed to indicate the effectiveness of the services provided to military veterans, which necessitated this research. The VA website indicates some of the mental health support services for veterans that they VA provides, including psychotherapy talks. accessing VA services for PTSD/depression, which begins with a veteran applying for VA healthcare (VA, 2020). Some of the veterans who provided some recommendations on how to improve supportive services for veterans indicated that the VA should work with Veterans Outreach Centers, increasing timeliness for veterans in need of services, partnering with community services to make more mental health services available, and utilizing technological apps to assist in providing better mental health services. These findings might therefore validate the third assumption on the need to improve the supportive services that military veterans receive from the VA. All the participants were enrolled in Veteran Healthcare System and had at some point in time sought services from a provider for

post-traumatic stress disorder (PTSD) and/or depression. When asked about how satisfied they were with the services that they received from the VA for their mental health, 47% indicated that they were somewhat satisfied while 41% were neither satisfied nor dissatisfied. To increase the satisfaction of the veterans regarding the services that they received from the VA for their mental health, there is a need for improving the services that veterans receive from the VA.

## **Conclusion**

The findings from the survey indicated that the first assumption could be validated since 33% were not sure whether psychotherapy was effective or ineffective while 25% indicated that talk therapy was somewhat ineffective, which is a significant proportion. There is therefore a need to improve on psychotherapy for military veterans. The study also found that 40% of all participants indicated that medication received from the VA was somewhat ineffective, which is a significant percentage, and therefore validating our second assumption that there is a need for an enhanced medication management for military veterans. Regarding supportive services from the VA, 41% of the survey participants indicated that the supportive services were neither effective nor ineffective, while 15% indicated that the supportive services were ineffective, representing some significant proportion of the veterans. It is therefore recommended that supportive services be enhanced for veterans to help mitigate depression.

## CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

After a thorough review of the data collected and the literature review, the following conclusions were made regarding this study's theory of change as follows:

**Assumption 1:** If PTSD/psychotherapy is improved, then depression among military veterans would be improved. **Partially Validated.** Qualitative data collected supports this assumption since the interviewees called for use of trauma-focused cognitive-behavioral therapy (CBT) for treating PTSD.

**Assumption 2:** If medication management is enhanced, then depression among military veterans would be improved. **Validated.** Quantitative data from the survey supports this assumption as 40% of the survey participants indicated that medication management received from the VA was ineffective. The participants also called for the VA to consider alternative treatment methods, such as use of medical marijuana.

**Assumption 3:** If support services are increased, then depression among military veterans would be improved. **Partially validated.** This is because 41% of the survey participants indicated that they were unsure of the support services that they were receiving, while 16% indicated that the support services were somewhat ineffective, which partially validates the third assumption.

### Conclusions

The military veterans experiencing PTSD and/or depression will be engaged in talk-therapy and trauma-focused CBT which is based on the trauma that the veterans have experienced during wars. Alternative treatment techniques, particularly the use of medical marijuana as a treatment method for PTSD and/or depression will be implemented.

Technological advancement will also play a crucial role in the treatment of PTSD and/or depression for military veterans, and will also help them open up on their experiences.

Medication management was found to be somewhat ineffective for military veterans since majority of the veterans who participated in the survey indicated that the medication that they received from the VA was not working for them. There is therefore a need for more effective means through which medication can be made to work for military veterans. Some veterans face challenges in prescriptions as their needs and preferences were sometimes not taken into consideration when coming up with a treatment plan for them. These mismatches are a common occurrence which usually causes challenges with treatment adherence for military veterans. Improvements therefore need to be made regarding medication management for military veterans by the VA to ensure that they receive the best services that they can get, and to ensure that they adhere to the prescription received from VA providers.

Military veterans receive several supportive services from the VA, including educational, financial, housing, and caregiver support. A considerable percentage of veterans surveyed indicated that they received somewhat effective services from the VA, while a majority were undecided as to the effectiveness of the services that they received from the VA. The findings also indicate that a considerable percentage of military veterans do not find the supportive services that they receive from the VA to be effective. This means that more supportive services are needed to ensure that military veterans are supported in every way possible. More supportive services will help military veterans deal with PTSD/depression that they may be experiencing.

### **Policy Recommendations**

Policy recommendations include implementing trauma-focused therapy for military veterans with PTSD for a period of one year since this treatment method has been indicated to be



quite effective from the interviews conducted in this study. Mental health experts interviewed in this study indicated that this treatment option was the method they would recommend for veterans experiencing PTSD and/or depression. The VA should focus on trauma-focused therapy, which is specific and focuses on how traumatizing events impact the veterans' mental, behavioral, or emotional wellbeing. Randomized control trials can be conducted to determine the effectiveness of this method. This policy is achievable since it will involve working with psychologists who are working with the VA to implement this policy. The policy is realistic since trauma-focused cognitive-behavioral therapy has been found to be an effective evidence-based treatment for children, adolescents, and even parents experiencing trauma-related difficulties (Child Welfare, 2018). This policy should be implemented for a period of one year to allow for an effective evaluation of the effectiveness of the treatment method on military veterans.

### **Recommendations for Further Study**

Recommendations for further study is to consider using medical marijuana as an alternative treatment for PTSD and/or depression for military veterans. The military veterans who participated in the survey suggested that the VA considers this treatment alternative. Studies have found that medical marijuana can be used to treat people with PTSD by reducing depressive episodes and thinking about suicide (Paddock, 2019). The study indicated that people with PTSD and who failed to use cannabis in the last 12 months were considerably more likely to experience severe depression and to have suicidal thoughts than those who reported that they had used the substance (Lake, et al., 2020). This policy is therefore specific as it involves using cannabis as an alternative treatment for PTSD and/or depression. The policy is measurable as a study can be conducted for a period of one year to compare the veterans who used medical marijuana and

those who did not to determine the effectiveness of the policy. The policy is achievable as it only involves recommending the usage of the treatment option to veterans experiencing PTSD and/or depression. The policy is realistic as studies have been conducted and have shown great promise on the effectiveness of cannabis. The timeframe for the policy is a year to allow for an evaluation of its effectiveness on military veterans experiencing PTSD and/or depression.

Leveraging technological advancements, particularly the StrongMind initiative when providing care and offering supportive services for military veterans for one year is another policy recommendation that the VA should work on. This policy follows recommendations for improving VA services that veterans made in the survey. Cutting edge tools such as 3-D printing and augmented reality can be used by clinicians to treat veterans experiencing PTSD and/or depression in ways previously unimaginable. The StrongMind Initiative makes use of virtual reality gaming to treat veterans experiencing PTSD and for providing a safe and supportive environment for processing trauma and opening up about their experiences (Asgedom, 2020). This policy is specific and can be measured by evaluating the effectiveness in treating military veterans for a period of one year. The VA can be achieved by investing in VR software and hardware systems for treating veterans with PTSD and/or depression. This policy is realistic as it involves leveraging emerging technology to help veterans deal better with PTSD and in also creating an environment where they can comfortably open up about their experiences. The timeframe is one year.

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## **Appendices**

### **Interview Questions for James, the Psychiatrist**

1. What do you consider to be the best psychotherapy service for veterans dealing with PTSD/depression?
2. Could one combine psychotherapy with medication for PTSD/depression treatment? If yes, how effective is it?
3. Any suggestions on how the mental health of veterans can be improved?

### **Interview Questions for Stacy, the First Psychologist**

1. What do you consider to be the leading cause of mental health problems for military veterans?
2. What do you consider to be the best treatment option available for military veterans with mental health problems?
3. What recommendations do you have for improving on the mental health of veterans?

### **Interview Questions for Jane, the Second Psychologist**

1. What is your typical procedure for diagnosing and treating PTSD/depression?
2. Do you offer medication to your patients?
3. What recommendations do you make for improving the management of depression among military veterans?

### **Survey Questions for Military Veterans.**

1. Are you currently enrolled in the Veteran Healthcare System? Yes/No. If your answer is no, you do not have to complete this survey.
2. Have you ever sought services from a provider for post-traumatic stress disorder (PTSD) and/or depression? Yes/No. If your answer is no, you do not have to complete this survey.
3. How satisfied were you with the services that you received from the VA for your mental health?
  - ☐ Very satisfied
  - ☐ Somewhat satisfied
  - ☐ Neither satisfied nor dissatisfied
  - ☐ Somewhat dissatisfied
  - ☐ Very dissatisfied
4. Did you receive psychotherapy (talk therapy)? Yes/No. If yes, how effective do you think it was for treating your condition?
  - ☐ Very effective
  - ☐ Somewhat effective
  - ☐ Neither effective nor ineffective
  - ☐ Somewhat ineffective
  - ☐ Very ineffective
5. Were you prescribed any medication? If yes, how effective do you think the medication was in treating your condition?

- ☐ Very effective
- ☐ Somewhat effective
- ☐ Neither effective nor ineffective
- ☐ Somewhat ineffective
- ☐ Very ineffective

6. Have you received the following supportive services from the VA? Please select all that apply.

- ☐ Educational
- ☐ Financial
- ☐ Housing
- ☐ Caregiver support
- ☐ Other

7. If you selected supportive services in the previous question, how effective do you think they were in managing your mental health?

- ☐ Very effective
- ☐ Somewhat effective
- ☐ Neither effective nor ineffective
- ☐ Somewhat ineffective
- ☐ Very ineffective

8. On a scale of 1-5, with one being not effective at all and 5 being very effective, how would you rate the effectiveness of the support services that you have been receiving from the VA?



9. What changes would you recommend the VA make to improve treatment and supportive services provided to military veterans with depression and/or PTSD?