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Educating Providers to Screen for Post-Traumatic Stress Disorder

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Educating Providers to Screen for Post-Traumatic Stress Disorder

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Educating Providers to Screen for Post-Traumatic Stress Disorder

Abstract

Background: The purpose of this evidence-based change in practice is to increase the knowledge base of psychiatric providers in outpatient psychiatric settings, by educating clinicians regarding the significance of implementing a post-traumatic stress disorder (PTSD) screening tool during the initial evaluation of patients. This can help to identify patients with PTSD that may not have been identified on initial visit, and may otherwise go unrecognized or untreated for PTSD, without the inclusion of a PTSD screening tool.

Problem: Evidence suggests that PTSD is underreported and overlooked in most populations. However, there is no standardized practice surrounding the routine use of a PTSD screening tool to assist clinicians in diagnosing PTSD. When a PTSD screening tool is utilized, a PTSD diagnosis can be established with greater ease. Among most study populations, the prevalence of PTSD is substantial and requires treatment and intervention.

Methods: Databases such as CINAHL, PubMed, and Google Scholar were used to collate the most recent medical and psychiatric literature through 2009. A review of the literature regarding the application and use of PTSD screening tools to assess undiagnosed PTSD was evaluated.

Intervention: Educating clinicians about the importance of applying a screening tool to identify individuals with PTSD has become necessary. Two educational luncheons were provided to five psychiatric providers at a clinic in Pleasanton, CA. A pre- and post-Survey Monkey were provided to clinicians to assess utilization and necessity of PTSD screening tools. In addition, a toolkit containing current evidence-based interventions, treatments, support groups, and counseling was explained to providers and placed in practice for reference.

Results: There was a 60% increase in PTSD screening during initial patient assessment, a 40% increase in knowledge regarding PTSD screening, a 60% increase in the awareness of common PTSD screening tools, a 100% increase in providers feeling that they had been educated on validated/appropriate PTSD screening tools, and a 60% increase in providers feeling that they have access to resources to help those with a PTSD diagnosis.

Conclusion: Undetected and undiagnosed PTSD is common. Furthermore, treatment and intervention cannot be provided to those suffering from PTSD without a diagnosis. Evidence shows screening for PTSD can improve patient outcomes and overall quality of life, although further studies are needed to create a standardized screening tool to identify and treat individuals with PTSD.

Key Terms: ‘PTSD’, ‘trauma’, ‘screening’, ‘screening tools’, ‘therapy’, ‘interventions’, ‘PCL-5’, ‘screening tool’, ‘outpatient’, and ‘psychiatry’

Educating Providers to Screen for Post-Traumatic Stress Disorder

Background

When one thinks of post-traumatic stress disorder (PTSD), often veterans and war traumas come to mind. Rarely, an association is made between PTSD and civilians who have experienced distress or trauma. Nonetheless, PTSD can occur in men, women, and children of all varying ages; PTSD does not distinguish between gender, age, occupation, or any other social factor. A trauma can occur at any point in someone's life. PTSD can stem from childhood trauma, and manifest in adulthood. Some criterion to be diagnosed with PTSD consists of witnessing or experiencing a traumatic event, which results in multiple trauma-related symptoms. Symptoms of PTSD include, but are not limited to irritability, insomnia, dissociative reactions, decreased interest in activities, isolation, and experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (American Psychiatric Association, 2013). Due to the lack of discrimination of this disorder, it is beneficial for clinicians to routinely screen for PTSD in suitable and trained settings. Conversely, ignoring PTSD screenings in healthcare can have its consequences, and arguably even be negligent.

Problem Description

According to a systematic review conducted by Spottswood et al. (2017), the prevalence of PTSD when screened in primary care is 12.5%. This percentage is similar to that of depression. With recent increases in health costs attributed to PTSD, optimal management and care is required for the population suffering from it. Furthermore, PTSD not only affects those who suffer from the illness, but also affects the communities in which crisis intervention is not regularly implemented, substance abuse is used as a means of treatment, and state or federal monetary funds are spent on maintaining the safety of underserved individuals. Clinicians will

regularly screen for depression, but often overlook PTSD. Consequently, not screening for PTSD can lead to an incorrect diagnosis and inappropriate treatment, which in turn can lead to permanent damage and life-threatening behaviors.

Setting

This project took place in an outpatient psychiatric clinic located in California. Due to restrictions from COVID-19 and the mandated shelter in place ordered by Governor Gavin Newsom, this project took place over Zoom meeting, telephone, and email. Those who participated in this project maintained social distancing and were at all times a minimum of six feet from one another. Zoom meetings were not recorded to respect privacy of providers.

Specific Aim

Due to the non-discriminating nature of PTSD and the wide range of individuals affected by PTSD, establishing a proper diagnosis in addition to viable treatment options is necessary. Educating clinicians on the importance of implementing a screening tool to assess those with possible PTSD, is crucial in helping clinicians identify patients with PTSD who may have been overlooked or have been undiagnosed.

An initiative to educate clinical providers on how to implement/and the importance of implementing, the Posttraumatic Stress Disorder Checklist for the DSM-5 (PCL-5) screening tool (see Appendix C) on psychiatric patients at an outpatient psychiatric clinic in Pleasanton, CA, was completed by January 2021. The criteria of individuals were specific to participants receiving initial treatment. The PCL-5 screening tool was chosen as this tool could be administered in waiting rooms before clinical evaluation with a standard five to ten-minute completion time. The clinical education for providers to implement a PTSD screening tool established how and when a PTSD diagnosis was overlooked, undiagnosed, and untreated. The

intent was to increase the knowledge of providers, establish a proper PTSD diagnosis for patients who preliminarily screened positive for PTSD through a screening tool, and, thereafter, administer formal treatment. With the statistical frequency of PTSD being comparable to rates of depression, and screenings for depression becoming a systematized practice, initiating the use of a standardized PTSD screening tool upon assessment and evaluation of individuals in a psychiatric outpatient setting would provide early detection, early intervention, and proper therapy for those with undiagnosed PTSD. This was done with the intent of ultimately improving patient outcomes and sustaining a better quality of life (QOL).

Available Knowledge

PICOT Question

Educating providers on the importance of assessing individuals with trauma and how implementing the PCL-5 screening tool upon initial psychiatric evaluation in the outpatient setting affects the ability to identify and capture those with trauma that may have otherwise gone unidentified due to not having proper trauma screening.

Search Method

A review of existing literature was performed using various databases including the Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed, and Google Scholar. The key terms: “PTSD,” “trauma,” “screening,” “screening tools,” “therapy,” “interventions,” “PCL-C screening tool,” “outpatient,” and “psychiatry,” were used to search these databases. Searches were limited to complete, peer-reviewed articles in English only. No articles published before the year 2009 were used, to obtain the most current and prevalent research. Twenty-five articles were chosen based on the abovementioned criteria.

The articles chosen focused on the benefits of screening for PTSD, and the outcomes of predicting PTSD in various settings. The goal was to obtain information about the effectiveness of applying screening tools to identify symptoms of and treat, undiagnosed PTSD. If a screening tool for PTSD is implemented, those who may have been overlooked in the past, can receive proper treatment.

Critical Appraisal of Evidence

Appraisal Tools

The John Hopkins *Research Evidence Appraisal Tool* (Dang & Dearholt, 2017) was used to evaluate the articles chosen for this study. This appraisal tool was elected because of the criteria used in determining the quality of evidence of each article. Moreover, this appraisal tool was utilized because of the specificity and significance required in deeming the articles relevant, and for clinical adjudication.

Integrated Review of Literature

Inpatient and Outpatient PTSD Screening

The focus of this project centers around providing clinicians with training to optimize the use of a PTSD screening tool implemented in initial psychiatric evaluation in psychiatric outpatient settings. Utilizing a screening tool affects the ability to identify those with trauma, who may have otherwise gone unidentified, due to a lack of proper trauma screening. Following the most current literature (Appendix D), trauma and traumatic injuries occur frequently, and are highly prevalent. These traumas may result in physical and non-physical injuries that can eventually lead to PTSD. In a study assessing PTSD in an acute trauma population by Frank et al. (2017), the application of a standardized method to efficiently screen trauma patients after traumatic events was analyzed. The Primary Care Posttraumatic Stress Disorder (PC-PTSD)

screening tool was administered to trauma patients. The PC-PTSD screening tool was chosen based on its length and aptness in determining PTSD outcomes. Twenty-eight percent of participants screened positive for PTSD and received a psychological health consultation. The early identification and treatment of trauma are crucial to accelerating recovery in trauma patients. Many of the patients who screened positive for PTSD were also advised to avail outpatient treatment measures. Without proper screening, these patients might still be suffering from PTSD without a diagnosis or viable treatment options.

Attention to psychological adjustments in response to trauma, especially in children, is vital to child development. About one-fourth of all children experience serious injuries that can initiate the onset of PTSD. Mental health traumas experienced as an adolescent, has effects on mental well-being into adulthood, therefore shaping the future of an individual and their mental well-being (Bjornsen et al., 2017). Negative health outcomes in adulthood, increased medical conditions, and decreased QOL were attributed to childhood mental health conditions. Cline et al. (2018), adopted a screening tool to identify symptoms of traumatic stress, post-discharge, in children with accidental injuries. Of those screened, 29% screened positive and of that 29%, 32% of those that screened positive were referred for psychological evaluation. This screening tool identified young patients in need of evaluation and possible intervention for PTSD, following accidental trauma. Furthermore, the identification of PTSD would not have been possible without the implementation of a screening tool. Implementing a tool for PTSD screening at an early age, can enable early detection and necessary interventions to avoid lasting psychological effects as an adult.

In a study conducted by Roberts et al. (2016), patients who had received an implanted cardioverter defibrillator (ICD) were screened for PTSD. According to previous studies, those

who received an ICD and consequently suffered from PTSD were associated with higher cardiac-specific mortality. PTSD is often undetected in patients with an ICD, and result in permanent and life-threatening patient outcomes. The development and implementation of a protocol using the PC-PTSD tool to screen patients with ICDs for symptoms of PTSD yielded positive results in 18% of the participants. These participants were then referred to mental health specialists for evaluation and treatment. While the ICD patient population is extremely specific, this study demonstrated that PTSD symptoms are highly prevalent in a diversity of patients and supports the need for routine screenings. With early recognition, treatment and referrals can be beneficial in decreasing mortality in patients who have received an ICD. The earlier a patient can be referred to mental health professionals after screening positive using the PC-PTSD screening tool, the earlier they can receive treatment.

Early detection of PTSD is justifiably as important as early intervention. An estimated 80% of the population from the Netherlands have experienced trauma; of that 80%, 14% have been diagnosed with PTSD. In a study by Dekkers et al. (2010), it was determined if it was possible to identify subjects at risk of developing PTSD, by referring them to the Victim Support Foundation. Participants of the Victim Support Foundation who had undergone physically violent and sexual assaults, stalking, car accidents, and other traumas were recruited. The Trauma Screening Questionnaire (TSQ) was distributed among 100 participants. According to the criteria outlined by the DSM-IV, 41% were diagnosed with PTSD. Along with PTSD, there was strong statistical evidence and correlation with depression. The study determined that those at risk for PTSD could be screened effectively, thus qualifying them for psychiatric treatment. Along with PTSD, other mental conditions were also screened and predicted. Early diagnosis

and treatment can preserve mental health and well-being and reduce the costs of treating mental health crises.

In a study conducted by de Bont et al. (2015), PTSD screenings were used in routine screenings for patients already diagnosed with psychotic disorders. Although the prevalence of PTSD is high in patients with psychotic disorders, it is recognized that an additional diagnosis of PTSD is often overlooked and underreported. The Trauma Screening Questionnaire (TSQ) was used amongst this population during routine psychiatric visits, supervised by a mental health worker. Results for this study showed 16% of those diagnosed with psychotic disorders also required a comorbid PTSD diagnosis. In addition, according to mental health organizations, 0.5% of individuals with psychotic disorders have a coexisting PTSD disorder (de Bont et al., 2015). This study showed that PTSD was actually 32 times higher than what is recorded by other mental health organizations. This indicates an underreporting and overlooking of PTSD diagnoses in patients with already established psychiatric disorders. Undiagnosed and untreated coexisting PTSD can have prolonged adverse consequences.

PTSD Prevalence and Natural Disasters

Although the premise of PTSD focuses on the experience of a traumatic event, the extent to which an event is deemed traumatic is open to interpretation. Some may not view an experience as traumatic, but the way one perceives trauma does not discredit a traumatic experience. To some, trauma may be physical and violent event; to others, trauma may be related to a verbal and passive event. In a study conducted by Gökçen et al. (2013), the prevalence of PTSD and PTSD symptoms were evaluated amongst adolescents who experienced a non-destructive earthquake of moderate magnitude. An earthquake with a 4.3 Richter scale magnitude occurred in Konya, Turkey, on September 10, 2009. A second earthquake with a magnitude of

4.7 Richter scale occurred eight hours after the first. Both earthquakes were of moderate magnitude and were non-destructive; no deaths were associated with these earthquakes and only a few buildings in Konya suffered moderately damage. Nonetheless, natural disasters can be psychologically harmful even when they are not physically catastrophic.

This cross-sectional study was conducted six months after the earthquakes. Participants comprised 500 students of 70 different schools in Konya. Finally, 450 children and adolescents (F= 214, M= 236) aged 12-14 years, studying in grades six through eight, and exposed to the 2009 Konya earthquakes were evaluated this study. The severity of PTSD symptoms was assessed using the Child Posttraumatic Stress Disorder- Reaction Index (CPTS-RI); this self-reported index was administered and evaluated. Of the participants, 24.3% met the criteria for PTSD, and 52.7% of adolescents exhibited moderate to severe level PTSD symptoms. PTSD is the most common mental health disorder amongst children and adolescents, and any form of trauma, or perceived trauma, can have lasting effects (Gökçen et al., 2013).

In 2004, a tsunami, regarded as one of the most devastating natural disasters of the century, hit Southeast Asia and took the lives of over 227,000 people. In Malaysia, 68 lives were lost. More than 40 villages were affected and over 4,000 people were left with some form of trauma from the tsunami. The study completed by Ghazali et al. (2012), focused on PTSD symptoms among adolescent tsunami victims and survivors, four years after the tragedy. Participants comprised 216 adolescents (F= 113, M= 103) between the ages of 13 and 19 years, who were directly exposed to the tsunami. PTSD symptoms, diagnostic criteria, and PTSD severity were assessed using the CPTS-RI self-reported questionnaire completed by the participants; those unable to complete the questionnaire due to illiteracy were interviewed by three qualified research assistants using the same CPTS-RI (2012).

A cross-sectional survey design was utilized to determine the severity of symptoms related to a PTSD diagnosis among those affected by the 2004 tsunami. Of the participants, 24.76% were diagnosed with PTSD. Furthermore, of those studied, 8.3% of participants had severe PTSD symptoms, 39.8% had moderate symptoms, and 42.1% had mild symptoms. Older participants tended to relay more severe symptoms than younger participants. Altogether, 90.3% of participants exhibited symptoms of PTSD, 4 years after the tsunami occurred. This study may be limited due to self-reporting of participants. PTSD symptoms could therefore have been under- or over-reported. The findings in this study support other long-term studies illustrating a powerful association between PTSD and natural disasters, even years after the disaster has occurred (Ghazali et al., 2012).

On January 12, 2010, an earthquake struck Haiti leading to the devastation and destruction of cities, homes, and lives. This earthquake left over 200,000 dead and more than 300,000 injured. A study conducted by Cadichon et al. (2017), investigated the long-term consequences of an earthquake on adolescents and young adults, six years after the disaster, between May and June of 2016. Literature assessing the impact of natural disasters on mental health more than five years after a traumatic event, is scarce.

The population of this cross-sectional study examined adolescents attending five metropolitan schools of one of the areas most affected by the earthquake. Participants included 723 adolescent and young adults (F= 364, M= 359) between 14 and 24 years old who had experienced the 2010 Haiti earthquake, and had not received psychological support following the earthquake. PTSD and the severity of PTSD symptoms were analyzed using the Impact of Event Scale-Revised (IES-R). Of the 723 participants, 35.1% exhibited severe PTSD symptoms and 49.24% displayed moderate PTSD symptoms. One-third of the assessed population suffered

from severe PTSD symptoms directly related to the 2010 Haiti earthquake. This cross-sectional study could have been enhanced by, employing a longitudinal study design. A longitudinal study could have enabled the analysis of pathways of participants and helped them further understand the effects of other traumatic events experienced. The inability to assess other traumas limits research and interpretation of the prevalence of PTSD symptoms. Nonetheless, according to the statistics presented by the study, severe PTSD symptoms associated with a natural disaster, such as an earthquake, even six years after occurrence, remain strong in adolescent and young adult survivors (Cadichon et al., 2017).

Although not every natural disaster generates tangible destruction, some natural disasters can leave cities, towns, homes, and lives catastrophically devastated. Nepal, known as the 11th most earthquake prone country in the world (Government of Nepal, 2015), suffered a devastating 7.9 Richter scale earthquake, in 2015. Over 8,790 people died and 22,300 were injured during this earthquake; over one-third of the population of Nepal was affected. Due to the high number of individuals who suffer from mental health disorders, specifically PTSD, after surviving a natural disaster, a study executed by Dahal et al. (2017), aimed to distinguish the prevalence of PTSD among the 2015 Nepal earthquake survivors. The sample population of this study included 535 adult participants without language disorders who had experienced and survived the 2015 earthquake.

Three separate questionnaires given to each participant: the first was used to establish socio demographic variables; the second included damage to community, property, and post-earthquake factors (loss of job and income); and the third focused on PTSD. The PTSD Checklist Civilian (PCL-C), a self-rated questionnaire, was administered and completed by each participant. The results suggested that 1 out of 5 participants suffered from PTSD (18.5%). While

additional factors contribute to the stress of surviving a natural disaster, including the reconstruction of jobs, finances, families, and grief, the data represented in this study were comparable to similar studies concentrating on mental health and PTSD following a natural disaster (Dahal et al., 2018). The findings of this study reinforced the need for continued mental health support after natural disasters.

In the study conducted by Chung et al. (2014), PTSD and psychiatric comorbidities were studied amongst flood victims in Pakistan. The primary purpose of this study was to examine the extent of PTSD among flood victims and to investigate the interrelationship between disaster exposure characteristics, emotional suppression, cognitive disorders, PTSD, and psychiatric comorbidities. Participants were 131 (F= 89, M= 42) flood victims from Pakistan. The General Health Questionnaire-28 (GHQ-28) was used to estimate the likelihood of participants being diagnosed with or suffering from general psychiatric morbidity at interview; the Posttraumatic Stress Diagnostic Scale (PDS) was used to measure PTSD symptoms; the Courtauld Emotional Control Scale (CECS) was used to measure the impact of suppressing anger, depression, and anxiety; and the Cognitive Distortion Scales (CDS) was used to test dysfunctional cognitions.

The flood victims and survivors were invited to participate in this research study after verbally confirming they had been affected by the flood. Only adults, 18 years or older who were affected by the flood at least four weeks prior to the study were allowed to participate. After informed consent was obtained, the above questionnaires and assessment tools were implemented upon interview. After analyzing the results of the PDS, all 131 participants met the diagnostic criteria for PTSD. In addition, disaster exposure was significantly and positively correlated with PTSD, psychiatric comorbidity, and cognitive distortions. Former literature has

claimed that even with the most devastating disasters, the incidence of PTSD is rarely greater than 50%.

These articles were chosen to demonstrate the strong correlation between natural disasters and PTSD. In accordance with the extant literature, the articles examined, revealed positive and lasting psychological effects in those who had experienced and survived a natural disaster. In addition, PTSD and PTSD symptoms had no association with age. Various statistical data showed conclusive evidence of PTSD in children as young as 12 years old and the adult and geriatric population. Natural disasters can occur at any moment and be cataclysmic in damage and destruction. Infrastructures can be destroyed, families can be torn apart, and those who survive can suffer lasting mental health illnesses. While the widespread association of PTSD attributed to natural disasters continues to be prevalent, focus should be shifted to treating those impacted and suffering from the abiding symptoms of PTSD.

Prevalence of PTSD and Childhood Abuse

Abuse and trauma during childhood have been associated with direct psychiatric difficulties. The effects of childhood sexual abuse have been associated with reduced cognitive function, reduced academic achievement, and decreased IQ scores. Severely abusive sexual trauma in childhood has a known neuropsychological impact and positively correlates to the development of PTSD. In a study performed by Barrera et al. (2012), neuropsychological performance was assessed in three groups of children. The first group of children had been diagnosed with PTSD while the second group had not. These participants were victims of sexual abuse. A third group of participants with no history of abuse was used as a control group. There were 76 participants in total. To assess for PTSD and related psychiatric symptoms the Posttraumatic Stress Symptoms Checklist, the Mini International Neuropsychiatric Interview

(MINI), the Trail Making Test (TMT), the California Verbal Learning Test (CVLT), the Rey-Osterrieth Complexity Figure Test, and the Stroop Color-Word Interference Test were used. Following that, a psychometric and neuropsychological assessment completed by a qualified and trained psychologist was conducted over one and a half hours.

There was no significant difference in neuropsychological performance between the first and second group of children, but there was a strong inability to inhibit autonomic responses and a decrease in cognitive function among those who experienced sexual abuse, regardless of PTSD status. This study demonstrates the direct effects of trauma on cognition and cognitive abilities. The lasting effects of trauma and stunted developmental growth are strongly associated. Providing thorough assessments and proper diagnoses for those suffering from PTSD is beneficial to care practices and treatment of individuals.

Among children and adolescents, adolescent females who have experienced an interpersonal trauma are most at risk of developing PTSD (Alisic et al., 2014). In a study examining the severity of PTSD and depression in adolescent females, by John et al. (2017), child abuse played a significant role in later manifestation of these symptoms. Participants recruited for this study were 81 adolescent girls (11-16 years of age) and divided into two separate groups. The first group consisted of females with a history of child abuse (physical, sexual, and exposure to violence). The second group was a control group; the inclusion criteria were females with no exposure to any measured traumatic event and with no current mental health illnesses. The National Survey of Adolescents (NSA) was used to gather trauma history and exclude those in the control group who did not match criteria. Trauma interviews were then conducted using behaviorally specific dichotomous questions. In addition, participants were asked to complete the Difficulties in Emotional Regulation Scale (DERS), the UCLA PTSD

Reaction Index – Adolescent version, and the Short Mood and Feeling Questionnaire (SMFQ). Compared to the control group, adolescent girls with a history of trauma reported greater PTSD and depressive symptoms. Adolescent girls exposed to abuse also demonstrated greater difficulties in all aspects of emotional regulation. Abuse in childhood was found to be directly associated with risks of developing mood and anxiety disorders that manifest in later, adult years. Given this high rate and association, early diagnosis and screening and early interventions, for young adolescent females who have suffered trauma, is momentous in treating mental health disorders.

Current research has also attempted to determine association between the age of self-reported sexual abuse and the development of PTSD symptoms in adulthood. A study by Schoedl et al. (2010), examined 60 outpatients of the Program for Victims of Violence of the Department of Psychiatry at the Federal University of Sao Paulo. Participants of this study were already receiving regular treatment through the program and had been diagnosed with PTSD due to exposure to traumatic events. The PTSD Scale was administered to participants to rate severity of PTSD symptoms. For the measurement of the severity of depressive symptoms, participants also completed the Beck Depression Inventory (BDI). In addition, the Early Trauma Inventory (ETI) was used to examine adults' past traumatic experiences that occurred during childhood or teenage years. The traumas were categorized and calculated by a trauma index. Of the participants, 65% believed that early sexual abuse and trauma had a negative impact on their current lives. Furthermore, when the age of trauma and sexual exposure corresponded to onset of puberty (before or after 12 years old), participants were more likely to suffer from severe depression and PTSD symptoms, than those who experienced trauma before the age of 12. The findings of this study coincide with that of other studies, which suggest that high rates of mental

illness positively correlate to a history of childhood trauma, and the age and developmental stage in which an individual experiences trauma can predict psychiatric symptoms in adulthood.

Women and PTSD

In prenatal care, screening for depression is common, but screening for PTSD is rare. Yet, PTSD has been associated with negative prenatal birth effects and long-term child outcomes (Wenz-Gross et al., 2016). Wenz-Gross et al. investigated if screening for PTSD using a 4-item PC-PTSD screening tool in routine prenatal care would be feasible and beneficial. Seventeen percent of the women screened positive for PTSD and showed that screening for PTSD can be feasible as part of routine prenatal visits. It is important to emphasize the importance of PTSD screening in prenatal care due to the association with complicated and negative prenatal effects on both mother and baby. Although depression is routinely screened for, PTSD should be implemented into standard prenatal care for all women. Wenz-Gross et al. argues that depression stems from PTSD; therefore, additional support and treatment are needed to reduce the possibilities of comorbid complications (2016).

In addition to prenatal care, childbirth can also be a source of trauma for mothers and trigger PTSD. Mothers often have certain expectations regarding childbirth and can be disappointed when complications occur. In a study evaluating childbirth with traumatic births causing PTSD by O'Donovan et al. (2014), it was demonstrated that 50% of women reported some aspect of childbirth as traumatic, and 7.9% developed PTSD between 4- and 6-weeks postpartum. The Post Traumatic Diagnostic Scale was used to diagnose PTSD and the severity of its symptoms in these women. Moreover, a questionnaire and screening tool was recommended to distinguish which mothers were “at-risk” for the development of PTSD. PTSD following childbirth was associated with significant problems in mother-infant attachment, partner

relationships, and implied increased use of the healthcare system. It is valuable to detect PTSD in these often-neglected populations, and in turn, promote health and well-being of both mother and child (O'Donovan et al., 2014).

Symes et al. (2016), created a rapid-assessment screening tool to predict prolonged PTSD among mothers who had experienced intimate partner violence (IPV) and abuse and are seeking abuse-related support for the first time. Worldwide, 30% or more women are likely to experience IPV, and a substantial number of women develop PTSD. PTSD in mothers has been linked to delays in child development and poor behavioral outcomes, including aggression and hostility, that adversely affect the lives of both mother and child. The screening tool was assessed at eight months after seeking support and again at 16 months. The data showed that the screening tool was successful in predicting long-term PTSD symptoms in mothers who suffered from IPV for up to 16 months after initial contact for support, thus enabling early treatment/intervention and improving the lives of mothers and their children. Additionally, this tool was validated and shown to be useful in other populations, including those who suffer trauma and are identified through screening instead of self-report.

Women who suffer violent relationships or IPV often experience decreased mental health and well-being. These impacts on health are well-established in the literature and can include, physical, psychological, and emotional impacts on women. In a cross-sectional research study conducted by Svavarsdóttir et al. (2014), 306 women in an emergency department or at their university, filled out questionnaires regarding their physical and mental state. In addition, these women were asked to self-report IPV using the WAST screening tool, PC-PTSD Screening Tool, and the SF-36 Short-Form Health Survey (commonly used to screen QOL). Of the participants, 55 women, or 18% had admitted to experiencing IPV in their current relationship. Of the 55

women, 17 (31%) also reported symptoms consistent with PTSD. Those who admitted to current IPV and also exhibited PTSD symptoms were associated with significantly lower physical and mental health screenings, including problems in workplace settings, limited daily activities, and poorer physical conditions.

According to the study of Svavarsdóttir et al. (2014), approximately one-third of the population studied admitted to IPV and reported symptoms of PTSD. This is consistent with previous literature. The screening tools used in this study were brief, but they provided valuable information regarding IPV and PTSD. Utilizing screening tools is beneficial in supplying immediate and appropriate assistance to victims, and appropriate first response can be provided to this population. Early detection of IPV can also lead to early intervention and diagnosis of PTSD or other mental illnesses, and therefore improve QOL and save lives (2014).

Treatment for PTSD

There are few guidelines to follow when treating a patient with PTSD, but one of the first approaches of psychological treatment recommended, is trauma-focused cognitive behavioral therapy (TF-CBT). In a study conducted by Deisenhofer et al. (2018), 317 patients receiving evidence-based psychological interventions were chosen to be treated with either TF-CBT or eye movement desensitization and reprocessing (EMDR). The Patient Health Questionnaire (PHQ) was used to measure and treat depressive symptoms. Additionally, this study identified which treatment each patient should undergo through, based on various factors (age, employment, gender, and functional impairment) and an automated algorithm. Those on antidepressant medications were investigated throughout the study. This study was conducted in hopes of assessing which treatment method, along with antidepressant medication, was most effective in symptom management of those diagnosed with PTSD (Deisenhofer et al., 2017).

The results were consistent with previous studies, and supported the use of psychotherapy in addition to antidepressant medications. As stated before, an automated algorithm was used to predict which psychological treatment would best suit each patient. This is an important factor when considering psychotherapy to treat PTSD. “Although both interventions can be effective in the treatment of PTSD, patients with this condition vary substantially in their treatment response and illness course” (Deisenhofer et al., 2018). Each patient should be treated separately, thus, requiring individualized treatment.

Therapeutic modalities used in treatment for PTSD can range from EMDR and medication to more holistic and natural approaches, such as yoga and art with medications. In a study coordinated by Price et al. (2017), 9 women between the ages of 25 and 55 years, participated in a 20-week, hour-long, weekly yoga practice in addition to their pre-existing pharmacological treatment and psychotherapy. The sample population was diagnosed with chronic treatment-resistant PTSD. “Results from the present study revealed that participants achieved substantial reductions in PTSD severity. This included loss of the PTSD diagnosis and attainment of asymptomatic status, as well as clinically significant decreases in dissociation symptoms at levels comparable to those established for bona fide trauma-focused psychotherapies (e.g., measured by treatment effect sizes)” (Price et al., 2017).

D. Lynn (2010) elaborates on the use of medications but acknowledges the efficacy of medications in combination with psychological treatment in ensuring desirable patient outcomes. Similarly, Price et al. (2017) and Deisenhofer et al. (2018), performed studies that both inquired about the use of psychotherapy in addition to medications. Both studies produced results aligned with those of the study conducted by D. Lynn (2010). Although PTSD treatment is not

standardized, the current literature suggests an antidepressant and some form of psychotherapy (i.e., TF-CBT, yoga, meditation, or EMDR) facilitate superior patient outcomes.

Combination therapy is the most efficacious in treating PTSD. Although medication can help to alleviate symptoms, the addition of other therapeutic modalities provides a more comprehensive treatment approach. It is important to tailor the treatment to the needs of the individuals as not every individual respond to one particular treatment method. Evidence supports different therapeutic approaches with medications as superior to medications alone. Some individuals may benefit from natural methods such as yoga, mindfulness, and art, while others respond to individual therapy that allows for deeper thought exploration with medications.

Rationale

Utilizing Lewin's Change Theory provided the foundational framework for the implementation of this project; this project involved educating psychiatric providers on how to initiate and apply the use of a routine screening tool to screen for PTSD that could help identify untreated trauma. The unfreezing stage of Lewin's Change Theory was applied when clinicians were taught the importance of implementing the PCL-5 screening tool in initial psychiatric assessments. The utilization of the PCL-5 screening tool eliminates possible misdiagnoses and treatment for patients with actual PTSD. Changing the assessment process and screening for PTSD assists the clinician in diagnosing patients and understanding the source of trauma instead of treating symptoms associated with an alternate diagnosis. Once enough evidence has been obtained, eventually standardizing this tool into practice (refreezing) can provide more specific treatment outcomes for patients (Finkelman, p.70).

Methods

Context

PTSD has become a prevalent mental health disorder and treatment for the same cannot be initiated until diagnosed appropriately. Due to a lack of education regarding the need for a standardized screening for PTSD, some who suffer from this disorder do not receive the treatment needed to live high-quality lives. Providers and clinicians implementing the PCL-5 screening tool into psychiatric practices can reduce the number of individuals suffering from this illness by quickly and preliminarily detecting trauma. Furthermore, a precise diagnosis of PTSD and proper treatment can be implemented instead of solely treating the symptoms associated with trauma. With the application of educating providers about the significance of implementing a PTSD assessment tool to psychiatric patients, mental health clinicians can efficiently recognize the origin of trauma and better diagnose and treat individuals. This project consisted of educating providers on the importance of implementing the PCL-5 screening tool in an outpatient psychiatric clinic in September 2020. Providers were also educated on referencing a PTSD toolkit to assist in treatment options and optimistically improve patient outcomes. The toolkit consisted of resources and current evidence-based PTSD treatment, therapies, and medication appropriate for supporting a PTSD diagnosis. Data was collected, analyzed, and will be presented by May of 2021. In addition to those who suffer from this illness, the communities and resources used to treat undiagnosed PTSD have the potential to be much safer and greatly reduced, respectively. With clinicians, patients, and communities working together, those affected by PTSD could eventually experience a more suitable standard of living and improve their overall QOL.

It was intended that practicing clinicians act as key stakeholders for the successful education and hopeful implementation of the PCL-5 screening tool as part of the initial psychiatric evaluation. By utilizing a PTSD screening tool, psychiatric clinicians could efficiently guide treatment for patients who qualify for a PTSD diagnosis through the use of an available PTSD toolkit. With early identification and intervention, patients could potentially experience a sense of stability and improved QOL, through treatment. In turn, the communities—other key stakeholders—would benefit from those treated for PTSD through reduction of emergency services, including emergency room (ER) visits that impact the financial state of hospitals, and urgent crisis interventions that would otherwise cause prospective harm to those with PTSD as well as the community in which they live. Finally, the patients were the essential stakeholders. This evidence-based change project directly impacts their care and treatment. With successful and efficient diagnosis of PTSD, treatment could be initiated, and patients could experience increased QOL.

Proposed Interventions

The first option is to make no change and keep the status quo. Doing so, however, will lead to a continued absence of PTSD diagnoses and prolong the absence treatment of patients who suffer from this illness. ER visits and crisis intervention resources will continue to be utilized in excess, and those who suffer from this mental health condition will continue to live unsatisfactory lives. In contrast, option two is to make it mandatory to utilize the PCL-5 screening tool upon each initial psychiatric assessment. At the outpatient clinic in California, current standardized screening tools utilized at this clinic are: PHQ9 (depression screening), GAD (anxiety screening), ASRS-v1 (attention deficit disorder screening), Mood Disorder Questionnaire (bipolar screening), DAST (drug abuse screening) and AUDIT-C (alcohol abuse

screening). A PTSD screening tool is presently not part of the initial visit. The PCL-5 is a 20-item self-report assessment that evaluates the 20 DSM-5 symptoms associated with PTSD. On a scale from 0-4, patients are asked to self-rate each symptom. A score between 31-33 is suggestive of a possible PTSD diagnosis (U.S. Department of Veteran Affairs, 2018). Option three is to educate providers regarding the necessity of utilizing PTSD screening tools to assess trauma and care requirements for those suffering from PTSD. Making the PCL-5 commonplace upon initial psychiatric assessment causes no harm to the patient and little additional work for providers. When evaluating the risks and benefits of implementing the PCL-5 screening tool, the benefits far outweigh the risks.

Providers were educated on the importance and reason for administering the PCL-5 screening tool to patients to assess trauma. A three-hour educational luncheon hosted via Zoom, so providers could attend in the convenience of their homes because of the shelter in place mandate due to the COVID-19 pandemic, was conducted. It is important to note that the clinic's receptionist also attended this Zoom meeting, as the tool was to be initially administered by the receptionist before initial visit with clinicians. This meeting equipped clinicians with statistical information regarding current evidence-based PTSD rates, the statistical necessity of screening for trauma, how to implement and interpret the PCL-5 screening tool, and the utilization of the PTSD toolkit, to better serve those diagnosed with PTSD. Four months later, a follow-up luncheon for providers was hosted to answer new questions and endorse further discussions about the success of implementing the PCL-5 to new psychiatric patients.

As stated, before initial mental health evaluation, the PCL-5 screening tool was to be administered to patients in the waiting rooms at a psychiatric outpatient clinic in California. The screening tool was only given to new patients. Patients who attended in-person visits filled out

the screening tool after checking in and returned the tool to the trained receptionist after completion. It is important to note that due to mandated shelter in place orders, the receptionist could implement the PCL-5 through the phone or through telemedicine visits. An educated and trained clinician then interpreted the results of the completed PCL-5. If a score was “positive,” or between 31-33, a thorough and comprehensive assessment was completed to diagnose or rule out PTSD. If a PTSD diagnosis was warranted, the PTSD toolkit was referenced. The toolkit contained medication options aiding treatment for PTSD, cognitive therapy options, and additional resources specific to PTSD and a PTSD diagnosis (see Appendix E). The patient was then provided with appropriate treatment and trained clinicians evaluated the success of treatment and therapies at every routine follow-up visit. In addition, treatment was adjusted accordingly so the patient received the most individualized and beneficial treatment options available to assist in supporting increased well-being.

Gap Analysis

There is ample evidence in the literature that attests to potential social and financial benefits of better treatment of PTSD. As mentioned earlier, one of the problems faced by doctors, psychiatrists, psychiatric mental health nurse practitioners (PMHNP), and other health professionals in treating PTSD involves compliance. In a major study published in the *Journal of Psychiatric Research* entitled, “Posttraumatic stress disorder and non-adherence to medication prescribed for chronic medical conditions: a meta-analysis,” the authors noted that non-adherence rates of treatment for PTSD ranged from 10% to 42% with a median of 29% in the 16 studies analyzed (Wasson et al., 2018). A number of methods and instruments were used to measure the level of noncompliance including self-reports and questionnaires, electronic device monitoring, pill count, levels of thromboxane as well as other drug and metabolite indices.

Myriad explanations were provided to account for the high rates of non-adherence among PTSD patients. One of the major reasons cited was the presence of comorbidity. In fact, a high percentage of PTSD patients exhibited other serious medical conditions such as depression, generalized anxiety, substance use, and other mental health issues. Drug and alcohol addiction are also rampant among such patients. In an article by Ayangbayi et al. (2017), it was revealed that ER visits related to PTSD and substance abuse alone cost \$5.6 billion. This cost accounted for more than 7% of total ED visit costs. As everyone in the health service industry is aware, all of the aforementioned conditions present problems with compliance. Other factors contributing to non-adherence include costs (which can be very high), family issues (divorce, domestic violence etc.), as well as physical disability and a range of non-psychiatric health issues (cardiovascular, respiratory, kidney etc.). Some patients relocated to other areas or discontinued therapy due to lack of motivation or tried other therapies elsewhere.

Problems with compliance also affected PTSD patients treated with widely used psychotherapeutic methods. In a study conducted under the auspices of the Institute of National Health by Lisa Najavits (2015), researchers found up to 90% dropout rates for cognitive processing therapy (CPT) and up to 50% for cognitive behavioral therapy (CBT). Both CPT and CBT have been shown to be excellent therapies for PTSD, but no single approach is effective for all patients. Another potential problem to look out for in extreme cases is suicide. In an article published in the *PTSD Quarterly* of The National Center for PTSD (2017), authors estimated suicide rates for PTSD to be (on average) 13 times greater than that among the general population. The aforementioned studies referred to illustrate some of the problems faced by health professionals in the treatment and retention of PTSD patients. The studies cited also illustrate why changes are needed not only at the clinic where this project was implemented, but

in clinics worldwide. As noted, the project aims to address problems related to the diagnosis and screening of PTSD by educating practitioners on the use of the PCL-5 screening tool and thereby referring a PTSD toolkit. Without knowledge about the initiation of a standardized screening tool for PTSD, there continues to be a gap among identifying, diagnosing, and treating this mental disorder (see Appendix F). Oftentimes, PTSD symptoms can mimic alternative psychiatric diagnosis such as that of depression or anxiety. This can result in PTSD diagnoses to be overlooked and misdiagnosed. Some patients may not disclose or know how to disclose past traumas that warrant a PTSD diagnosis. Educating providers on the significance of providing a screening tool upon initial assessment helps the clinicians properly diagnose PTSD and identify those experiencing symptoms from past or present traumas.

As a provider, routinely screening for PTSD, specifically in outpatient psychiatric clinics, can eliminate the chasm associated with undiagnosed PTSD and determine the root cause of psychiatric symptoms instead of alternatively treating a misdiagnosis. Prior to implementation, clinicians completed a survey through Survey Monkey based on knowledge, satisfaction, and the use of PTSD screening tools. The goal was for clinicians to find significance in implementing the PCL-5 screening tool upon initial assessment as a preliminary screening tool for PTSD. If a patient was screened “positive” for PTSD, a thorough and comprehensive PTSD evaluation was conducted and the PTSD toolkit was utilized if a diagnosis was made.

Gantt Chart

As seen in Appendix G, the initiation of this project began with a literature review between January 21, 2020 and May 8, 2020. Whilst obtaining the most current evidence-based information regarding the prevalence and need to screen for PTSD, reviews and establishment of this project simultaneously took place with Dr. Trinette Radasa. From May 9, 2020 to August 9,

2020, goals and objectives were developed. Implementation of this project took place from August 10, 2020 to January 10, 2021. Education regarding the utilization of the PCL-5 screening tool, implementation of the screening tool, and resources/therapies provided through the toolkit were supplied. This time period also included data collection and evaluation of the success of the educational luncheon. From January of 2021 through to May of 2021 the data gathered was analyzed and the findings will be presented.

Work Breakdown Structure

For timely implementation of this DNP project, it was necessary to develop a Work Breakdown Structure (WBS). The WBS identified the steps required to ensure prompt execution and specific details associated with this project (see Appendix H). At the psychiatric clinic in California, the providers were educated on the importance of administering the PCL-5 screening tool to patients upon initial psychiatric evaluation. As mentioned, current standardized screening tools utilized at this clinic are: PHQ9 (depression screening), GAD (anxiety screening), ASRS-v1 (attention deficit disorder screening), Mood Disorder Questionnaire (bipolar screening), DAST (drug abuse screening) and AUDIT-C (alcohol abuse screening). A PTSD screening tool is presently not part of the initial visit.

If a patient was given the PCL-5 and screened “positive” for PTSD, a thorough and comprehensive psychiatric evaluation was completed by the clinician. If PTSD was identified and diagnosed, the PTSD toolkit was referenced by the clinician. Again, this toolkit provided a list of medications proven to benefit those with PTSD (SSRIs/benzodiazepines); psychological therapy geared specifically for those that have PTSD (trauma-focused cognitive behavioral therapy/EMDR, etc.), and resources such as support groups specific to PTSD treatment

(Deisenhofer et al., 2018) were provided. It is the duty of the clinician to provide associated care to patients within the provided toolkit given a “positive” PCL-5 screening.

Responsibility/Communication Plan

In order for successful implementation of this project, communication was conducted between the student and the DNP chair, Dr. Trinette Radasa. Communication was managed through email, phone, text, Zoom meeting, and face-to-face sessions. In addition, contact between the student and psychiatric clinicians/receptionists was organized (see Appendix I). Initial communication was presented in a flyer to clinicians. In order to not add to clinician workloads, communication, education and training was provided during a weekend and through Zoom meetings. The most current evidence-based literature and research regarding the necessity for PTSD screenings was presented to clinicians, and further explanation and application of implementing the PCL-5 into practice, specifically the necessity and benefits of thorough screenings, was discussed. In addition, budget and time management were explored.

Training, education, and implementation was explained over one luncheon session. A month after implementation, a post-implementation follow-up luncheon was organized for further assessment, feedback, and questions. Receptionists were also included in these luncheon meetings and trained to administer the PCL-5 screening tool to new patients to complete before evaluation. Email, phone, and text messaging was made available to all clinicians and receptionists to contact the student for any additional questions or concerns.

SWOT Analysis

In order to identify the viability of this project, it was necessary to conduct a SWOT analysis (see Appendix J). Due to the complexity of this disorder, PTSD can be underdiagnosed or misdiagnosed. Without initiating a standardized screening tool for PTSD, there is a divergence

in identifying, diagnosing, and treating this disorder. A “positive” PTSD screening tool supports the clinician to further focus and evaluate the patient for a possible PTSD diagnosis upon the first visit, that would have otherwise gone undiagnosed without this tool. There is no cost for this screening tool as it can be downloaded from the internet. Patients who go unidentified despite PTSD symptoms, can experience memory triggers that may lead to anxiety, panic, depression, and even suicidal ideations. Through early assessment with appropriate interventions, this can be financially advantageous to the healthcare system as it can minimize psychiatric hospitalizations that would usually begin through the ER. Upon presentation in the ER, the likelihood of a clinician identifying a patient’s symptoms as that of PTSD is virtually non-existent. These patients will likely be labeled with “anxiety,” “panic,” or “depression” and treated as such in the ER or referred to inpatient psychiatry. With proper diagnosis and treatment of those with PTSD, treatment strategies can be implemented to reduce visits to ER/hospitals and allow patients to improve their QOL. Among the clinic’s strengths are: highly skilled employees familiar with state-of-the-art methods with proven success, excellent reputation, well managed and financially stable, excellent location and modern office space, welcoming friendly atmosphere and committed staff, excellent transportation connections via automobile and ample parking space, full handicap accessibility, and a steady client base (patients and families).

A weakness that may be identified with this project is the perception by clinicians of “more work,” by having to review and evaluate yet another screening tool. Furthermore, a new diagnosis of PTSD that is not identified until after several months or even years of psychiatric treatment, will require a new approach of care/treatment plan that includes the PTSD diagnosis to improve patient outcomes. Clinicians may view this as additional work and

overtime. Weaknesses of the clinic include high operational costs, small size, poor access by public transportation, high rent, time consumption due to prolonged patient evaluation.

A potential threat to this project is lack of patient and clinician participation. It requires “buy in” from the clinicians to utilize this tool as part of the initial visit. However, this can be ensured through identifying those with PTSD through education on the necessity of early screening. Identifying this disorder upon initial outpatient visit also allows clinicians to treat it early on, rather than several months or possibly even years later. It may not be identified early on because clinicians do not associate patient’s symptoms with PTSD and/or patients may be unclear about whether they should inform the clinician of past traumas. Therefore, initiation of the screening tool upon initial visit can save time and also provide early intervention and treatment for the patient. Furthermore, threats to the clinic include competition from rival businesses (both public and private clinics), patient compliance and drop-outs, regulatory and zoning restrictions, drug and alcohol abuse and harmful side-effects of medication.

This project provides opportunities to capture a PTSD diagnosis that may otherwise have been overlooked/underdiagnosed. Current screening assessments does not include a PTSD screening as part of the initial visit. The implementation of this screening tool affords the clinician an opportunity to treat a patient with PTSD, using a toolkit of resources that can improve their QOL. The opportunities include increased treatment efficiency and revenues, increased compliance among patients and their families, increase in client base and potential expansion. Improved outcome for patients and other stakeholders (investors, families, community) are also ensured.

Proposed Budget

The project incurred low development and execution costs, while promising to increase revenues in a relatively brief time period. As noted, the cost of materials and instruction, which entailed five hours of virtual training to professional personnel employed full-time at the outpatient clinic, amounted to \$2000. This included the initial budget of materials utilized (roughly \$400), the students' time spent researching this project, and the time spent creating and explaining the toolkit. Together, this time amounted to roughly 27 hours of work (20 hours of research aside from clinical experience, 2 hours of toolkit creation, and 5 hours of project implementation). The hourly pay for the student was roughly \$60/hour. The cost analysis to recompense the student for their time and effort in educating clinicians and implementing this project would be \$1620 (see Appendix K). A psychiatric nurse and assistant will also be in charge of tracking and further follow-up, through quarterly videoconferences with the clinicians. In case of conflicts in scheduling, recordings of the video sessions will also be made available for downloading purposes, while technical/information technology (IT) installation and troubleshooting issues will be outsourced. The added costs (nurse and assistant engagement, IT) are expected to add another \$4500 over the course of a year, bringing the total budget for the project to \$6500.

As noted, actual revenues are difficult to predict with precision but there are myriad reasons for optimism. Revenue-generating factors may consist of increased efficiency and better treatment outcomes, an increase in patient compliance and addition to the patient pool, improved reputation and increase in the volume of referrals, more accurate diagnosis of PTSD. Due to all of these factors, revenues are expected to increase substantially over a relatively brief time

period. As far as the original investment is concerned, prognosticative calculations can be made for both the break-even point and for Return on Investment (ROI).

Some of the problems connected with measuring financial outcomes and measures of a health-related business compared to a standard retail business have been discussed; however, the basic computations are similar. The break-even point is the point at which the total cost and revenue are equal, after which point the business starts to make money. In this case, only the part of the business related to PTSD treatment is considered, while costs refer to the screening course and follow-up. On an average, approximately 10% of this business corresponds to a PTSD diagnosis. This ensures an average of approximately 384 visits a year since the clinic sees around 3840 patients a year (16 patients per day, 5 days a week). In a business the formula for the break-even point is: $\text{Break-Even point (units)} = \text{Fixed costs} / (\text{Sales price per unit} - \text{variable costs per unit})$. In terms of the dollar, the formula becomes: $\text{Break-Even Point (sales dollars)} = \text{Fixed costs} / \text{contribution margin}$. When calculating the breakeven point for a clinic, “units” can be substituted by “patient visits.” Each visit to the clinic can be expressed through an average cost in dollars for one-half hour of therapy or consultation. The calculations can be found in Appendix L. This will take approximately eight months to reach the break-even point and everything after the eight months will be added income. It is expected that there will be an additional 325 visits after reaching the break-even point, which will significantly increase the clinic’s revenue. ROI measures the net gain of an investment over a period of time. In the case of the psychiatric outpatient clinics, net gains are expected to amount to 50% profit. These calculations can also be found in Appendix L.

Based on the projections and calculations for the break-even point, at eight months, the clinic will have earned back the amount spent for the project, after which it will begin to earn

money from the added visits and increased retention of PTSD patients. In terms of the dollar, the break-even point will be reached once revenues are increased by another \$6500. This is equivalent to an increase of 130 total visits or about 16 extra visits per month. The ROI was calculated to be 50% with regard to PTSD patients over the course of one year. This projection might be somewhat optimistic since the compliance for PTSD patients fluctuates considerably and other clinics compete for patients. In any case, it illustrates how improving the diagnosis of PTSD through screening can reap benefits for the clinic, not only by adding to profit and income but also by taking more effective care of patients.

Proposed Outcome Measures

Educating providers regarding the change in the assessment process and screening for PTSD, could assist clinicians in diagnosing patients who may have gone undiagnosed, overlooked, or untreated without proper screening for this condition. When a patient's PCL-5 assessment screen was "positive," providers referenced the PTSD toolkit for treatment options and therapies. The toolkit contained medications proven to benefit those with PTSD (SSRI's and/or other medications), psychological therapy geared specifically for those that have PTSD, and resources such as support groups specific to PTSD treatment.

Survey Monkey was used for the proposed outcome measure. Two surveys were conducted; one before education regarding the implementation of the PCL-5 screening tool and one after education concerning implementation in a one-hour follow-up luncheon four months after education. Prior to the three-hour luncheon, clinicians were asked to complete a survey containing five questions. The five questions asked consisted of: 1. Do you actively screen for PTSD upon initial visit with your patients?; 2. Do you feel you have knowledge regarding the necessity of implementing a PTSD screening tool?; 3. Are you aware of the common screening

tools utilized for PTSD?; 4. Have you had any educational training on validated/appropriate screening tools for PTSD?; and, 5. Do you currently have access to resources for patients diagnosed with PTSD? These questions were answered with a yes or no.

After education about the implementation and utilization of the PCL-5 screening tool and toolkit, a follow-up luncheon was scheduled, four months later. At this luncheon, another survey was administered to clinicians to complete. This survey was also presented via Survey Monkey and contained the same five questions as above, allowing the clinicians to answer to these either with a yes or no. This evaluated the effectiveness and significance of provider education and also reinforced further discussions and questions or concerns to be addressed.

Proposed Analysis

Previously, the goals of the project have been elucidated. The primary goal is to more effectively diagnose and treat patients coming to the clinic with PTSD by educating providers about the importance and significance of incorporating a screening tool in the initial assessment. If this primary goal is accomplished, the project is also expected to create additional income for the clinic. Besides this important goal and consequence, other benefits are likely to result including financial and emotional relief to families of the patients, savings to private and public insurance and health providers as well helping the community by providing better healthcare and adding to the local tax revenue. The professionals at the clinic already have a proven track record in treating PTSD, but even skilled professionals can benefit from further training and education. Medical clinics differ in important ways from other businesses such as retail. Paradoxically, improved treatment in a health clinic may reduce income streams due to reduced visits and, in some instances, remission, while in other businesses, good service equates with increased traffic and sales. The reduction in visits due to better treatment is compensated, however, in a number

of ways. First of all, the freed-up time can be made available to other patients. Second, patients are more likely to stick with the clinic if they are satisfied with the treatment. Patients will be less likely to shift to other clinics or drop out of treatment altogether. On seeing the positive results, families will be more inclined to pay for treatment and not look elsewhere. The long-term success of the clinic is highly dependent on its reputation, which is expected to improve with improvements in assessment and diagnosis. Income generated from improvements in reputation are hard to measure but can be gauged by increases in referrals or by analyzing rating sites such as Yelp, CaseDash and RateMDs.

This DNP project was implemented on September 19, 2020. Seven providers from an outpatient psychiatric clinic located in Pleasanton, CA were invited to this educational luncheon, although only five attended. In addition to the providers who attended, one receptionist was also invited and attended the educational luncheon, although she was not included in the participation of the survey. Before the education program, attendees were provided with meals as an incentive to attend this teaching. Survey Monkey survey with five questions was distributed to attendees. These questions are listed in the above section labeled “Proposed Outcome Measures.” It was found that 80% of participants were not screened for PTSD upon initial visit, although 60% of clinicians felt they had the knowledge about the necessity of implementing a PTSD screening tool. Of the participants, 60% were unfamiliar with commonly used screening tools for PTSD. Significantly, 100% of participants had never had education on validated screening tools for PTSD and 80% of clinicians felt they did not have adequate resources for patients diagnosed with PTSD.

After completion of the Survey Monkey survey, attendees heard a lecture on the prevalence of PTSD, why a PTSD screening tool is necessary during initial assessment along

with other screening tools, how to implement the PCL-5 screening tool, and how to interpret other screening tools. There are five standardized screening tools provided to new patients by providers who attended this luncheon as a part of the assessment screenings for patients coming to clinical psychiatric settings for evaluation and treatment. It was established during this discussion that clinicians do not standardly ask patients about symptoms associated with PTSD unless the patient volunteers the information. If asked upon assessment, this can help a clinician to “flag” and explore further for possible PTSD; this may be the original cause of symptoms and reasons for seeking psychiatric care. Many patients will not discuss their PTSD as part of the symptoms unless asked.

The PTSD toolkit was also introduced and explained. It was reiterated that the screening tool was just that, a screening tool. Once a patient screened positive, the clinician should explore further, to assess for PTSD. If a PTSD diagnosis is warranted, the PTSD toolkit should be referenced. Providers were educated to perceive the PTSD toolkit as a “cheat sheet” to refer to when they diagnose a patient with PTSD and the toolkit includes first-line medication treatment that has shown success in treating PTSD, referrals for individual therapy, and support groups for patients with PTSD.

A second follow-up luncheon was provided four months after implementation. This luncheon was held on January 10, 2021. Additionally, lunch was provided, and the initial five providers and one receptionist attended. Attendees were given the same Survey Monkey questionnaire to complete. It was found that 80% felt the need to actively screen patients for PTSD upon initial visit and had access to resources for patients with a PTSD diagnosis. Of the participants, 100% felt that they had knowledge about the significance of implementing a PTSD

screening tool, were aware of the commonly utilized PTSD screening tools, and felt they were provided education on the validated PTSD screening tools.

Ethical Considerations

According to the American Nursing Association (ANA) Code of Ethics, Provision 6.2 The Environment and Ethical Obligation (2015), it is the duty and moral/ethical obligation of the healthcare provider to create an environment of safety and well-being. With limited mental health resources and an increase in mental health needs, it is the responsibility of the healthcare provider to treat mental illness. As claimed by the U.S. Department of Veterans Affairs, PTSD occurs in approximately 7-8% of the population (2018). Through early detection and intervention of those suffering from PTSD, QOL can be enriched. Furthermore, safety can be provided to communities enduring continued mental health crises due to a lack of mental health welfare and screening.

Screening for PTSD ultimately allows patients autonomy in their care. As clinicians, it is the duty and fidelity to provide patients timely and appropriate treatment in hopes of gaining an increased QOL and beneficence. Justice is provided to this population when initiating proper trauma screening, allowing efficient diagnoses and timely treatment, thus, allowing screening for all patients, especially those underserved.

In accordance with the Jesuit values of taking action against things that degrade human dignity and amplifying the voices of the underserved, this project protects a vulnerable population. Those unable to seek assistance for mental disorders require healthcare providers to recognize their need for treatment and ascertain the cause of mental illness. Those who suffer from mental illness oftentimes do not understand the root of their illness and deserve an understanding and an explanation of the symptoms they feel. Because there is a stigma

associated with suffering from a mental health illness in the present society, it is courageous for those who suffer from mental health issues to seek professional help. The moral and ethical duty of the Jesuit is to provide a voice to those who cannot speak for themselves, oftentimes protecting those who are unable to protect themselves. This can be done by recognizing and treating those with trauma which can, in turn, improve QOL of those vulnerable, overlooked, and underserved.

Results

As seen in Appendix M, there was a 60% increase in PTSD screening during initial patient assessment, a 40% increase in knowledge regarding PTSD screening, and a 60% increase in the awareness of common PTSD screening tools. 100% of providers felt that they had been educated on validated/appropriate PTSD screening tools, and there was a 60% increase in providers feeling that they have access to resources to help those with a PTSD diagnosis.

Moreover, clinicians also felt more confident in treating those with PTSD as they had access to specific PTSD resources from the toolkit provided. Of the participants, 100% felt that they had increased their knowledge about the significance of implementing a PTSD screening tool, had increased awareness of the commonly utilized PTSD screening tools, and felt confident about the treatment options due to having a referenced PTSD toolkit.

Discussion

Summary/Interpretation

This project corroborates the necessity of educating providers about utilizing PTSD screening tools. As seen in the literature, PTSD is underreported and when screened a PTSD diagnosis can be made in a timely manner, thus, accelerating patient treatment and outcome. The data illustrates that most providers are unaware of the statistical rates and requisite for PTSD

screening therefore do not use this screening tool. Once educated on its significance and importance in treatment, providers quickly adapted this screening method into ordinary practice. Providers henceforth felt they had adequate knowledge, tools, and resources to accurately diagnose and treat those who screen positive for PTSD. Although this population was small, this practice and education can be applied to any practice despite psychiatric specialty. Further studies should be done to investigate how education about this screening tool can impact other practices and improve patient treatment and QOL.

Limitations

Limitations of this project include a small sample size and the implementation of this screening tool into a localized population. The population studied was highly specific and the research results do not apply to the general public or general medicine. Gaps in the literature center around the lack of implementation in psychiatry. Implementing a screening tool in psychiatric settings seems necessary to aid in diagnosing and treating PTSD. Without a proper diagnosis, interventions remain obsolete and lasting effects of the disorder can become irreparable. Although there is current and available research regarding the use of PTSD screenings, further research needs to be conducted to implement and standardize this practice, especially in psychiatric settings. In addition, there are various screening tools which can preliminarily diagnose PTSD, making it difficult to choose one as the standard. If routine screenings for PTSD were applied in appropriate settings, acceptable treatment and diagnosis could be initiated, thus, providing better patient outcomes and a better QOL.

Conclusion

Due to the complexity of this disorder, PTSD can be underdiagnosed or misdiagnosed. Despite the lack of screening tools to diagnose PTSD, it is evident there is a need

for a customary and standardized PTSD screening tool used during routine appointments in healthcare; for example, the PCL-5 screening tool used in outpatient psychiatry, or the PC-PTSD screening tool used in primary care. Applying PTSD screening tools could be advantageous for communities, reducing their need for short-term crisis intervention and ensuring their safety. Though the prevalence of PTSD is overlooked and unknown, based on current literature it can be concluded that the widespread presence of PTSD is increasing. Associated with increased generality arrives an increased demand for detection and identification. With immediate recognition and intervention, those affected by PTSD can proceed to live high-quality lives with optimal and feasible treatment options.

References

- Alisic, E., Zalta, A. K., van Wesel, F., Larsen, S. E., Hafstad, G. S., Hassanpour, K., & Smid, G. E. (2014). Rates of post-traumatic stress disorder in trauma-exposed children and adolescents: Meta-analysis. *The British Journal of Psychiatry*, *204*(5), 335–340. <https://doi.org/10.1192/bjp.bp.113.131227>.
- American Nurses Association. (2015). *Code of ethics with interpretative statements*.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5* (5th ed.).
- Ayangbayi, T., Okunade, A., Karakus, M., & Nianogo, T. (2017). Characteristics of hospital emergency room visits for mental and substance use disorders. *Psychiatric Services*, *68*(4), 408–410. <https://doi.org/10.1176/appi.ps.201600125>
- Bardhoshi, G., Erford, B. T., Duncan, K., Dummett, B., Falco, M., Deferio, K., & Kraft, J. (2016). Choosing assessment instruments for posttraumatic stress disorder screening and outcome research. *Journal of Counseling & Development*, *94*(2), 184–194. <https://doi.org/10.1002/jcad.12075>
- Barrera, M., Calderón, L., & Bell, V. (2013). The cognitive impact of sexual abuse and PTSD in children: A neuropsychological study. *Journal of Child Sexual Abuse*, *22*(6), 625–638. <https://doi.org/10.1080/10538712.2013.811141>
- Lynn, D. (2010). Pharmacological treatment of combat-induced PTSD: A literature review. *The British Journal of Nursing*, *19*(5), 318–321.
- Bjørnsen, H. N., Espnes, G. A., Eilertsen, M.-E. B., Ringdal, R., & Moksnes, U. K. (2017). The relationship between positive mental health literacy and mental well-being among

- adolescents: Implications for school health services. *The Journal of School Nursing*, 35(2), 107–116. <https://doi.org/10.1177/1059840517732125>
- Cadichon, J. M., Lignier, B., Cénat, J.-M., & Derivois, D. (2017). Symptoms of PTSD among adolescents and young adult survivors six years after the 2010 Haiti earthquake. *Journal of Loss and Trauma*, 22(8), 646–659. <https://doi.org/10.1080/15325024.2017.1360585>
- Chung, M. C., Nasrullah, M., Jalal, S., & Khan, N. U. (2013). Posttraumatic stress disorder and psychiatric co-morbidity following 2010 flood in Pakistan: The roles of exposure characteristics, cognitive distortions and emotional suppression. *PsycEXTRA Dataset*
- Cipriani, A., Williams, T., Nikolakopoulou, A., Salanti, G., Chaimani, A., Ispert, J., Cowen, P. J., Geddes, J. R., Stein, D. J. (2018). Comparative efficacy and acceptability of pharmacological treatments for post-traumatic stress disorder in adults: A network meta-analysis. *Psychological Medicine*, 48(12), 1975–1984. <https://doi.org/10.1017/S003329171700349X>
- Cline, V. D., Whitaker, B., Duran, P. A., Ratcliff, K., Rosenfeld, E. H., & Naik-Mathuria, B. (2018). Scratching below the surface: screening for posttraumatic stress symptoms following hospitalization with the pediatric trauma service. *Journal of Trauma Nursing*, 25(4), 228–232.
- Cole, M. A., Muir, J. J., Gans, J. J., Shin, L. M., D’Esposito, M., Harel, B. T., & Schembri, A. (2015). Simultaneous treatment of neurocognitive and psychiatric symptoms in veterans with post-traumatic stress disorder and history of mild traumatic brain injury: A pilot study of mindfulness-based stress reduction. *Military Medicine*, 180(9), 956–963. <https://doi.org/10.7205/milmed-d-14-00581>

- Dahal, H. R., Kumar, S., & Thapa, D. K. (2017). Prevalence and risk factors of post-traumatic stress disorders among the survivors of 2015 Nepal earthquake, in Dhading, Nepal. *Sleep and Hypnosis, 20*(2), 128–139. <https://doi.org/10.5350/sleep.hypn.2017.19.0145>
- Dang, D., & Dearholt, S. (2017). *Johns Hopkins nursing evidence-based practice: Model and guidelines* (3rd ed.). Sigma Theta Tau.
- Deisenhofer, A. K., Delgadillo, J., Rubel, J. A., Böhnke, J. R., Zimmermann, D., Schwartz, B., & Lutz, W. (2018). Individual treatment selection for patients with posttraumatic stress disorder. *Depression and Anxiety, 35*(6), 541–550. <https://doi.org/10.1002/da.22755>
- Dekkers, A. M. M., Olf, M., & Näring, G. W. B. (2010). Identifying persons at risk for PTSD after trauma with TSQ in the Netherlands. *Community Mental Health Journal, 46*(1), 20–25. <https://doi.org/10.1007/s10597-009-9195-6>
- de Bont, P. A. J. M., van den Berg, D. P. G., van der Vleugel, B. M., de Roos, C., de Jongh, A., van der Gaag, M., & van Minnen, A. (2015). Predictive validity of the Trauma Screening Questionnaire in detecting post-traumatic stress disorder in patients with psychotic disorders. *The British Journal of Psychiatry, 206*(5), 408–416. <https://doi.org/10.1192/bjp.bp.114.148486>
- Frank, C. A., Schroeter, K., & Shaw, C. (2017). Addressing traumatic stress in the acute traumatically injured patient. *Journal of Trauma Nursing, 24*(2), 78–84. <https://doi.org/10.1097/jtn.0000000000000270>
- Ghazali, S. R., Elklit, A., Yaman, K., & Ahmad, M. (2013). Symptoms of PTSD among adolescents in Malaysia 4 years following the 2004 tsunami. *Journal of Loss and Trauma, 18*(3), 260–274. <https://doi.org/10.1080/15325024.2012.688703>

- Gökçen, C., Şahingöz, M., & Annagür, B. B. (2012). Does a non-destructive earthquake cause posttraumatic stress disorder? A cross-sectional study. *European Child & Adolescent Psychiatry, 22*(5), 295–299. <https://doi.org/10.1007/s00787-012-0348-8>
- Government of Nepal. (2015). *Nepal earthquake 2015: Post disaster need assessment* (No. VOL A).
- Jasbi, M., Bahmani, D. S., Karami, G., Omidbeygi, M., Peyravi, M., Panahi, A., Mirzaee, J., Holsboer-Trachsler, E., & Brand, S. (2018). Influence of adjuvant mindfulness-based cognitive therapy (MBCT) on symptoms of post-traumatic stress disorder (PTSD) in veterans – results from a randomized control study. *Cognitive Behaviour Therapy, 47*(5), 431–446. <https://doi.org/10.1080/16506073.2018.1445773>
- John, S. G., Cisler, J. M., & Sigel, B. A. (2017). Emotion regulation mediates the relationship between a history of child abuse and current PTSD/depression severity in adolescent females. *Journal of Family Violence, 32*(6), 565–575. <https://doi.org/10.1007/s10896-017-9914-7>
- Lutwak, N., & Dill, C. (2017). PTSD and risk of suicide. *Military Medicine, 182*(9-10), 1684. <https://doi.org/10.7205/milmed-d-17-00104>
- Njavits, L. M. (2015). The problem of dropout from “gold standard” PTSD therapies. *F1000Prime Reports, 7*, 43. <https://doi.org/10.12703/p7-43>
- O’Donovan, A., Alcorn, K. L., Patrick, J. C., Creed, D. K., Dawe, S., & Devilly, G. J. (2014). Predicting posttraumatic stress disorder after childbirth. *Midwifery, 30*(8), 935–941. <https://doi.org/10.1016/j.midw.2014.03.011>
- Price, M., Spinazzola, J., Musicaro, R., Turner, J., Suvak, M., Emerson, D., & van der Kolk, B. (2017). Effectiveness of an extended yoga treatment for women with chronic

- posttraumatic stress disorder. *The Journal of Alternative and Complementary Medicine*, 23(4), 300–309. <https://doi.org/10.1089/acm.2015.0266>
- Roberts, C. R., Wofford, J. E., Hoy, H. M., & Faddis, M. N. (2016). Implementation of a screening program for patients at risk for posttraumatic stress disorder. *Clinical Medicine Insights: Cardiology*, 10. <https://doi.org/10.4137/cmc.s39957>
- Schoedl, A. F., Costa, M. C. P., Mari, J. J., Mello, M. F., Tyrka, A. R., Carpenter, L. L., & Price, L. H. (2010). The clinical correlates of reported childhood sexual abuse: An association between age at trauma onset and severity of depression and PTSD in adults. *Journal of Child Sexual Abuse*, 19(2), 156–170. <https://doi.org/10.1080/10538711003615038>
- Spottswood, M., Davydow, D. S., & Huang, H. (2017). The prevalence of posttraumatic stress disorder in primary care: A systematic review. *Harvard Review of Psychiatry*, 25(4), 159–169. <https://doi.org/10.1097/HRP.000000000000136>
- Svavarsdóttir, E. K., Orlygsdóttir, B., & Gudmundsdóttir, B. (2014). Reaching out to women who are victims of intimate partner violence. *Perspectives in Psychiatric Care*, 51(3), 190–201. <https://doi.org/10.1111/ppc.12080>
- Symes, L., Maddoux, J., McFarlane, J., & Pennings, J. (2016). A risk assessment tool to predict sustained PTSD symptoms among women reporting abuse. *Journal of Women's Health*, 25(4), 340–347. <https://doi.org/10.1089/jwh.2015.5287>
- U.S. Department of Veterans Affairs. (2018, September). Retrieved from <https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp>.
- U.S. Department of Veterans Affairs. (2018, September). Retrieved from https://www.ptsd.va.gov/understand/common/common_adults.asp.

Wasson, L. T., Shaffer, J. A., Edmondson, D., Bring, R., Brondolo, E., Falzon, L., Konrad, B.,

Kronish, I. M. (2018). Posttraumatic stress disorder and nonadherence to medications prescribed for chronic medical conditions: A meta-analysis. *Journal of Psychiatric Research, 102*, 102–109. <https://doi.org/10.1016/j.jpsychires.2018.02.013>

Wenz-Gross, M., Weinreb, L., & Upshur, C. (2016). Screening for post-traumatic stress disorder

in prenatal care: Prevalence and characteristics in a low-income population. *Maternal and Child Health Journal, 20*(10), 1995–2002. <https://doi.org/10.1007/s10995-016-2073-2>

Yen, C.-F., & Hsu, C.-C. (2015). Post traumatic stress disorder in adolescents after a natural

disaster. In C. R. Martin, V. R. Preedy, & V. B. Patel (Eds.), *Comprehensive guide to post-traumatic stress disorder* (pp. 1–15). Springer Publishing Company.

Appendix A. Non-Research Approval Documents



DNP Statement of Non-Research Determination Form

Student Name: Alyssa Fraino

Title of Project: Educating Providers to Screen for Post-Traumatic Stress Disorder

Brief Description of Project:

Providers will be educated on the importance of implementing the PCL-5 screening tool to patients upon initial psychiatric assessment to assess for trauma. A three-hour educational luncheon will be hosted to providers including a pre survey questionnaire. This meeting will equip clinicians with statistical information regarding current evidence-based PTSD rates, the statistical necessity of screening for trauma, how to implement the PCL-5 screening tool, and the utilization of a PTSD toolkit to better serve those who thereafter are diagnosed with PTSD.

Education will include the necessity for the PCL-5 screening tool to be provided to patients at PTW in the waiting rooms. The screening tool will only be given to new patients. Patients are to fill out the screening tool after checking in for their scheduled office visit and return the tool to a trained receptionist after completion. The results of the completed PCL-5 will be reviewed and interpreted by the project lead (me). If a score is "positive," a thorough and comprehensive assessment will be completed to diagnose or rule out PTSD. If a PTSD diagnosis is warranted, the PTSD toolkit (provided by me) will be initiated. The toolkit will consist of a binder containing current medications aiding in treatment for PTSD, cognitive therapy options, group therapy, and additional resources specific to PTSD and a PTSD diagnosis.

An additional follow-up training will be provided to assess the success of implementing a PTSD screening tool to new psychiatric patients through post survey and time to answer additional questions or concerns regarding post-project implementation.

A) Aim Statement: By January 12, 2021, develop, implement and evaluate the education provided to psychiatric providers regarding the implementation and necessity of utilizing the PCL-5 screening tool upon all initial psychiatric evaluations.

B) Description of Intervention: Providing education surrounding the importance and significance of implementing the PCL-5 screening tool upon initial psychiatric evaluation/assessment.



C) How will this intervention change practice: Changing the assessment process and screening for PTSD can assist the clinician in diagnosing patients who may have gone underdiagnosed, overlooked, or untreated without proper screening for this condition.

Educating providers about the importance of utilizing this tool will help to assess and quickly identify potential PTSD. This will reduce the possibility of an overlooked, undiagnosed, and/or untreated PTSD diagnosis, decrease crisis intervention costs, and potentially increase revenue for practice. The intent is to establish a proper PTSD diagnoses for the patients who screen positive for PTSD and administer formal treatment that may exist as the primary or comorbid psychiatric diagnosis.

This education can be provided to any healthcare practice and does not have to be performed solely in psychiatry as PTSD rates are comparable to rates of depression.

D) Outcome measurements: A pre- and post-survey will be administered to providers surrounding the knowledge, necessity, usage and comfortability in utilizing a PTSD screening tool. Rates will compare prior knowledge (before the educational luncheon) to knowledge and usage of a PTSD screening tool after education. The same providers will be surveyed.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used:
<http://answers.hhs.gov/ohrp/categories/1569>

This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title:	YES	NO
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The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	X	
The specific aim is to improve performance on a specific service or program and is a part of usual care . ALL participants will receive standard of care.	X	
The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does NOT follow a protocol that overrides clinical decision-making.	X	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.	X	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.	X	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	X	
The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	X	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X	
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: <i>"This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board."</i>	X	

ANSWER KEY: If the answer to **ALL** of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is **NO**, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.



STUDENT NAME (Please print):

Alyssa Fraino

Signature of Student: ~~Alyssa Fraino~~

DATE: February 11, 2021

SUPERVISING FACULTY MEMBER (CHAIR) NAME (Please print):

Dr. Trinette Radasa

Signature of Supervising Faculty Member (Chair): ~~Trinette Radasa~~

DATE: February 11, 2021

Appendix B. Letter of Support from Agency



June 10, 2020

This is a letter of support for Alyssa Fraino to implement her DNP Comprehensive Project: The Significance of Educating Providers to Screen for Post-Traumatic Stress Disorders at Pathways to Wellness.

Printed Name: Cedric Hurskin, Chief Business Officer

Signature: *Cedric J. Hurskin*

Date: 6/10/2020

Pathways to Wellness Medication Clinic

This letter was created per the request of the addressee and contains confidential patient information in nature, and is intended only for the use of the individual addressee.

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Appendix C. PCL-5 Screening Tool

PCL-5

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	1	2	3	4
10. Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being "superalert" or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep?	0	1	2	3	4

Appendix D. Evaluation Tables

Citation	Design/ Method	Sample	Variables Studied	Measurement	Findings	Appraisal Worth to Practice
Frank et al., 2017. addressing traumatic stress in the acute traumatically injured patient.	Design: Pre-/Post-descriptive Survey Design Method: Patients in the trauma/surgical intermediate and general care inpatient unit were given a PC-PTSD screening tool to assess the requirement of a psychological consultation.	N=45	Independent: Patients being screened with the PC-PTSD screening tool. Dependent: Psychological health consultations and referrals for outpatient care.	Primary Care-Posttraumatic Stress Disorder (PC-PTSD) tool	Twenty-eight percent of patients triggered a positive PC-PTSD screening.	Strengths: Screening tool chosen was based on its length and appropriateness in determining PTSD. Limitations: The sample size was small, and the nurses were not well prepared to administer the screening, leading to some patients' lack of participation. Critical Appraisal Tool & Rating: <i>Evidence level III; High quality of evidence.</i>
Cline et al., 2018. Scratching below the surface: screening for posttraumatic stress symptoms following hospitalization with the pediatric trauma service	Design: Post-descriptive Survey Design Method: Pediatric patients who suffered accidental traumas were given the CTSQ to assess their need of a psychological health consultation.	N=31	Independent: Pediatric patients with accidental trauma and injuries. Dependent: Psychological health consultation and treatment for PTSD.	Child Trauma Screening Questionnaire (CTSQ)	Twenty-nine percent of those screened were positive, and thirty-two percent were referred to psychology consultations.	Strengths: This study highlighted the importance of screening the youth. Limitations: Small sample size and inconsistency of families when filling out forms for their children, were severe limitations to this study. Critical Appraisal Tool & Rating: <i>Evidence level II; Good quality of evidence.</i>
Roberts et al., 2016. Implementation of a screening program for patients at risk for posttraumatic stress disorder.	Design: Descriptive survey Method: ICD patients older than 19 years of age were screened with the PC: PTSD tool in	N=50	Independent: ICD patients Dependent: Referral to mental health specialists for evaluation and treatment.	Primary Care-Posttraumatic Stress Disorder (PC: PTSD) tool	Eighteen percent of ICD participant screened positive for PTSD.	Strengths: Adequate time frame for analysis. Determining that the population has a high statistical likelihood to have PTSD. Limitations: Very specific population

	outpatient clinics.					with a small sample size. Critical Appraisal Tool & Rating: <i>Evidence level III; Good quality of evidence.</i>
Wenz-Gross et al., 2016. Screening for post-traumatic stress disorder in prenatal care: prevalence and characteristics in a low-income population.	Design: Longitudinal study Method: A prenatal nurse administered a PTSD symptom screening procedure in routine prenatal care.	N=1259	Independent: Prenatal women during routine checkups. Dependent: Positive screening and early treatment for PTSD.	A 4-item Primary Care-Posttraumatic Stress Disorder (PC-PTSD) tool	Seventeen percent of women screened positive for PTSD.	Strengths: Adequate time frame for analysis. A large sample size provides more generalized information. Limitations: Population specific to a low-income group. Critical Appraisal Tool & Rating: <i>Evidence level II; High quality of evidence.</i>
Dekkers et al., 2010. Identifying persons at risk for PTSD after trauma with TSQ in the Netherlands.	Design: Survey Methodology Method: Victim Support Foundation victims were recruited to fill out the TSQ. One month later an additional follow up TSQ, Impact of Event Scale- Revised (IES-R), the Hospital Anxiety and Depression Scale (HADS), and the Mini International Neuropsychiatric Interview (MINI) were administered.	N=100	Independent: Participants who had undergone violent and sexual assaults, stalking, car accidents, and other traumas in the Victim Support Foundation. Dependent: Prediction of participants with positive TSQ and positive PTSD.	Trauma Screening Questionnaire (TSQ)	Forty-one percent met criteria according to the DSM IV for a diagnosis of PTSD.	Strengths: Adequate sample size. Those able to participate received closure from a diagnosis. Limitations: The participants had already suffered traumas, making their diagnosis more likely. Critical Appraisal Tool & Rating: <i>Evidence level III; Good quality of evidence.</i>

<p>O'Donovan et al., 2014. Promoting posttraumatic stress disorder after childbirth.</p>	<p>Design: Longitudinal study</p> <p>Method: Participants included 933 women who completed an assessment in their third trimester, followed by an assessment of 866 of the same women, four to six weeks postpartum. Assessments focused on trauma during birthing and factors to predict and diagnose PTSD.</p>	<p>N=933 (first assessment)</p> <p>N=866 (second assessment)</p>	<p>Independent: Women in their third trimester and four to six weeks postpartum.</p> <p>Dependent: Prediction of severity of PTSD symptoms and PTSD diagnosis.</p>	<p>The Post Traumatic Diagnostic Scale.</p>	<p>About eight percent of women developed PTSD between four and six weeks postpartum.</p>	<p>Strengths: Adequate sample size representative of a population.</p> <p>Limitations: Postpartum PTSD can also be associated with infant temperament and biological factors.</p> <p>Critical Appraisal Tool & Rating: Evidence level III; High quality of evidence.</p>
<p>Symes et al., 2016. A risk assessment tool to predict sustained PTSD symptoms among women reporting abuse</p>	<p>Design: A 7-year prospective, cohort study</p> <p>Method: Mothers were interviewed and completed a series of measures related to maternal mental health and PTSD predictor tools.</p>	<p>N=150</p>	<p>Independent: Women seeking IPV-related support through shelters or the justice system.</p> <p>Dependent: PTSD symptoms and diagnosis and entering those who screen positive into early intervention programs.</p>	<p>A rapid assessing screening tool made to predict PTSD symptoms</p>	<p>Highly predictive of PTSD through the rapid assessing screening tool. Those who had high scores were entered into early intervention programs.</p>	<p>Strengths: The study took place over 7 years. The language was inclusive to both English- and Spanish-speaking populations.</p> <p>Limitations: The tool was only tested on one population. The gold standard for measuring PTSD (PTSD-PC) was not used.</p> <p>Critical Appraisal Tool & Rating: Evidence level III; Good quality of evidence.</p>
<p>de Bont et al., 2015. Predictive validity of the Trauma Screening Questionnaire in detecting post-</p>	<p>Design: Randomized clinical trial</p> <p>Method: TSQ screening administered</p>	<p>N=2608</p>	<p>Independent: Patients with a psychotic disorder.</p>	<p>Trauma Screening Questionnaire (TSQ)</p>	<p>Sixteen percent of patients with psychotic disorders also screened positive for an</p>	<p>Strengths: Adequate sample size representative of a population. This studied a psychiatric population.</p>

<p>traumatic stress disorder in patients with psychotic disorders.</p>	<p>to screen for PTSD.</p>		<p>Dependent: Secondary PTSD diagnosis.</p>		<p>additional PTSD diagnosis.</p>	<p>Limitations: This study was not representative of the entire psychiatric population as it only focused on patients with already diagnosed psychotic disorders.</p> <p>Critical Appraisal Tool & Rating: <i>Evidence level III; High quality of evidence.</i></p>
<p>Barrera et al., 2012. The cognitive impact of sexual abuse and PTSD in children: A neuropsychological study.</p>	<p>Design: Quasi-Experimental</p> <p>Method: PTSD, psychiatric symptoms, and cognitive performance were assessed using the Posttraumatic Stress Symptoms Checklist, the Mini International Neuropsychiatric Interview (MINI), the Trail Making Test (TMT), the California Verbal Learning Test (CVLT), the Rey-Osterrieth Complexity Figure Test, and the Stroop Color-Word Interference Test. A psychometric and neuropsychological assessment completed by a</p>	<p>N = 76</p>	<p>Independent: Children with a history of sexual trauma.</p> <p>Control: Children with no history of sexual trauma.</p> <p>Dependent: Neuropsychological function.</p>	<p>Posttraumatic Stress Symptoms Checklist, Mini International Neuropsychiatric Interview (MINI), Trail Making Test (TMT), California Verbal Learning Test (CVLT), Rey-Osterrieth Complexity Figure Test, and Stroop Color-Word Interference Test</p>	<p>There was no significant difference in neuropsychological performance between the first and second group of children, but there was a strong inability to inhibit autonomic responses and a decrease in cognitive function in those who had experienced sexual abuse, regardless of PTSD status.</p>	<p>Strengths: Multiple tests were administered to test a variety of psychiatric symptoms. There was a control group comparable to the diversity of children chosen for the study.</p> <p>Limitations: Children were recruited from an organization that supports families going through prosecution of the alleged abuser; therefore, the sample may not be representative of all sexual abuse cases. Children were assigned a counselor that could have mitigated the effects of sexual trauma</p> <p>Critical Appraisal Tool & Rating: <i>Evidence level III; High quality of evidence.</i></p>

	qualified and trained psychologist was conducted over one and a half hours.					
John et al., 2017. Emotion regulation mediates the relationship between a history of child abuse and current PTSD/Depression severity in adolescent females.	<p>Design: Cross-sectional observation design</p> <p>Method: Group one consisted of females with a history of child abuse (physical, sexual, exposure to violence). Group two was a control group; the inclusion criteria were females with no exposure to any measured traumatic event and with no current mental health illnesses. Trauma interviews were then conducted using behaviorally specific dichotomous questions. In addition, participants were asked to complete the Difficulties in Emotional Regulation Scale (DERS), UCLA PTSD Reaction Index – Adolescent version, and</p>	N=81	<p>Independent: History of trauma or abuse.</p> <p>Dependent: Severity of PTSD/depressive symptoms and ability to emotionally self-regulate.</p>	Difficulties in Emotional Regulation Scale (DERS), UCLA PTSD Reaction Index – Adolescent version, and the Short Mood and Feeling Questionnaire (SMFQ)	Adolescent girls exposed to abuse also demonstrated greater difficulties in all aspects of emotional regulation. Child abuse was found to be directly associated with risks of developing mood and anxiety disorders that manifest in later, adult years.	<p>Strengths: The sample had a high degree of trauma exposure. A control group was used for comparison. Recruitment for the small sample size took place and produced an ethnically diverse sample.</p> <p>Limitations: The sample size was not adequate enough to represent a population, and only a select group of adolescents were studied. This study used self-reporting, which could cause bias.</p> <p>Critical Appraisal Tool & Rating: <i>Evidence level III; Good quality of evidence.</i></p>

	the Short Mood and Feeling Questionnaire (SMFQ).					
Schoedl et al., 2010. The clinical correlates of reported childhood sexual abuse: an association between age at trauma onset and severity of depression and PTSD in adults.	<p>Design: Retrospective cohort study</p> <p>Method: Participants were already receiving regular treatment through the program and had a diagnosis of PTSD with exposure to traumatic events. The PTSD Scale was administered to participants to rate severity of PTSD symptoms. Participants were also given the BDI to measure severity of depressive symptoms. In addition, the ETI was used to examine adults' past traumatic experiences that occurred during childhood or teenage years.</p>	N=60	<p>Independent: Patients receiving treatment from the program for Victims of Violence of the Department of Psychiatry at the Federal University of Sao Paulo, who had a diagnosis of PTSD and experienced childhood trauma.</p> <p>Dependent: Severity of PTSD/depressive symptoms and age of onset of symptoms.</p>	The PTSD Scale BDI ETI	Of the participants, 65% believed that early sexual abuse and trauma had had a negative impact on their current lives. Furthermore, when the age of trauma and sexual exposure corresponded to puberty onset (before or after 12 years old), participants were more likely to have severe depression and PTSD symptoms, than those who experienced trauma before age 12. This study suggests that high rates of mental illness positively correlate to a history of childhood trauma, and the age and developmental stage in which an individual experiences trauma can predict psychiatric symptoms in adulthood.	<p>Strengths: There were many different scales of measurement used to assess severity and degree of PTSD.</p> <p>Limitations: This study would benefit from using a perspective cohort sample. Data could be biased due to participants being from a specific population. The sample is too small for generalization.</p> <p>Critical Appraisal Tool & Rating: <i>Evidence level III; High quality of evidence.</i></p>

<p>Svavarsdóttir et al., 2014. Reaching out to women who are victims of intimate partner violence.</p>	<p>Design: Cross-sectional research design</p> <p>Method: Women seen in the emergency department or at their university, filled out questionnaires regarding their physical and mental state. In addition, these women were asked to self-report using the WAST partner abuse screening tool, PC-PTSD Screening Tool, and the SF-36 Short-Form Health Survey (commonly used to screen QOL).</p>	<p>N=306</p>	<p>Independent: Women seen in the emergency department or at their university between the ages of 18-67 years old.</p> <p>Dependent: IPV, PTSD symptoms, and overall mental and physical health.</p>	<p>WAST screening tool, Primary Care-Posttraumatic Stress Disorder (PC-PTSD) Screening Tool, and the SF-36 Short-Form Health Survey</p>	<p>Of the participants, 18% of women admitted to experiencing IPV in their current relationship. Of them, 31% of those who admitted to IPV also reported symptoms consistent with PTSD. Those who admitted to current IPV abuse and also exhibited PTSD symptoms were associated with significantly lower physical and mental health screenings, including problems in workplace settings, limited daily activities, and poorer physical conditions.</p>	<p>Strengths: The only criteria for this study consisted of women between the ages of 18-67 years old. Those who admitted to violence were provided services and help for current relationship situations.</p> <p>Limitations: Some women may not have been honest about their relationships and IPV. A cross-sectional study limits inferences about causality.</p> <p>Critical Appraisal Tool & Rating: <i>Evidence level III; High quality of evidence.</i></p>
<p>Cadichon et al., 2017. Symptoms of PTSD among adolescents and young adult survivors six years after the 2010 Haiti earthquake.</p>	<p>Design: Cross-sectional study</p> <p>Method: Participants who experienced the 2010 Haiti earthquake and did not receive psychological support following the earthquake, were analyzed using the</p>	<p>N=723</p>	<p>Independent: Adolescents and young adults who experienced the 2010 Haiti earthquake.</p> <p>Dependent: Severity of PTSD symptoms.</p>	<p>Impact of Event Scale-Revised (IES-R)</p>	<p>Of the participants, 35.1% demonstrated severe PTSD symptoms and 49.24% exhibited with moderate PTSD symptoms. One-third of the assessed population suffered from severe PTSD</p>	<p>Strengths: The sample size was more than acceptable. This provided a range of individuals to study.</p> <p>Limitations: A longitudinal study could enable analysis of pathways of participants and help further understand the effects of other traumatic events experienced. There was an inability to</p>

	Impact of Event Scale-Revised (IES-R).				symptoms directly related to the 2010 Haiti earthquake.	assess other traumas to interpret the prevalence of PTSD symptoms. Critical Appraisal Tool & Rating: <i>Evidence level III; High quality of evidence.</i>
Dahal et al. 2017. Prevalence and risk factors of Post-Traumatic Stress Disorders among the survivors of 2015 Nepal earthquake, in Dhading, Nepal.	Design: Cross-sectional study Method: There were three separate questionnaires given to each participant: one was to establish socio demographic variables, the second recorded damage to community, property, and post-earthquake factors, and the third focused on PTSD.	N=535	Independent: 2015 Nepal earthquake survivors. Dependent: Prevalence of PTSD.	Post-traumatic stress disorder checklist civilian (PCL-C)	One out of five participants suffered from PTSD (18.5%).	Strengths: The study has an adequate sample size. The questionnaires divided groups into demographics and focused on PTSD. Limitations: The cut off score of 44 and above without clinical diagnostic interview received a PTSD diagnosis. Critical Appraisal Tool & Rating: <i>Evidence level III; High quality of evidence.</i>
Chung et al., 2014. Posttraumatic stress disorder and psychiatric co-morbidity following 2010 flood in Pakistan: The roles of exposure characteristics, cognitive distortions and emotional suppression.	Design: Descriptive research design Method: GHQ-28 was used to estimate participants being diagnosed with or suffering from general psychiatric morbidity; PDS was used to measure PTSD symptoms; CECS was	N=131	Independent: Pakistan flood victim survivors Dependent: The extent of PTSD and the interrelationship among disaster exposure characteristics, emotional suppression, cognitive disorders, PTSD, and psychiatric comorbidities.	General Health Questionnaire-28 (GHQ-28) Posttraumatic Stress Diagnostic Scale (PDS) Courtauld Emotional Control Scale (CECS) Cognitive Distortion Scales (CDS)	Disaster exposure was significantly and positively correlated with PTSD, psychiatric comorbidity, and cognitive distortions.	Strengths: Various questionnaires were provided. The study was highly specific. Limitations: Limited and potentially biased sample. Self-report questionnaires. Prior traumatic life events information was not collected. Critical Appraisal Tool & Rating: <i>Evidence level II; High quality of evidence.</i>

	used to measure the impact of suppressing anger, depression, and anxiety; and CDS was used to test dysfunctional cognitions.					
Deisenhofer et al., 2018. Individual treatment selection for patients with posttraumatic stress disorder.	<p>Design: Multi-stage probability sampling design study</p> <p>Method: Patients with PTSD assigned specific psychotherapeutic treatments from a computerized algorithm based off a personalized advantage index (PAI), then given the PHQ to measure depressive symptoms and assess treatment.</p>	<p>N = 75 EMDR</p> <p>N =242 TF-CBT</p>	<p>Independent: Patients accessing treatment for PTSD in a primary care mental health service</p> <p>Dependent: EMDR or TF-CBT treatment</p>	The PHQ-9 was administered to measure depressive symptoms.	When presented with the right psychotherapeutic treatment in addition to medication, PHQ-9 scores ranged mildly depressive (a reduction in symptoms).	<p>Strengths: Adequate sample size. An algorithm was used to determine treatment (not randomized), based on PAI.</p> <p>Limitations: The questionnaire was used to examine depressive symptoms, not specifically PTSD symptoms.</p> <p>Critical Appraisal Tool & Rating: <i>Evidence level II; High quality of evidence.</i></p>
Lynn, 2010. Pharmacological treatment of combat induced PTSD: a literature review.	<p>Design: Literature Review</p> <p>Method: Literature review of nine articles analyzing the use of medication therapy alone, to treat PTSD and PTSD symptoms.</p>	<p>N = 31 Beta Blockers</p> <p>N = 252 SSRI</p> <p>N = 13 Benzo</p>	<p>Independent: Patients with combat-induced PTSD</p> <p>Dependent: Medication</p>	Combat PTSD and pharmacologic treatment of PTSD were terms used to obtain articles	One drug was not deemed superior to others. Medication with alternative CBT would produce better results in managing PTSD. Treatment should be based on an individual's requirements.	<p>Strengths: Anxiety disorders were not excluded in the selection of articles.</p> <p>Limitations: Sample sizes per pharmacological intervention are not equal, thus outcomes cannot be generalized on an entire population. Only combat veterans were included</p>

						<p>Critical Appraisal Tool & Rating: <i>Evidence level 1; High quality of evidence.</i></p>
<p>Price et al. 2017. Effectiveness of an extended yoga treatment for women with chronic posttraumatic stress disorder.</p>	<p>Design: Longitudinal study</p> <p>Method: Women diagnosed with chronic treatment-resistant PTSD participated in weekly hour-long yoga sessions, in addition to medication therapy to measure PTSD symptoms.</p>	<p>N = 9</p>	<p>Independent: Women diagnosed with chronic treatment-resistant PTSD</p> <p>Dependent: Weekly yoga practice and medication therapy</p>	<p>Clinician Administered PTSD Scale, Davidson Trauma Scale for PTSD, and Dissociative Experiences Scale at five separate points in time.</p>	<p>Significant (64%) reduction in PTSD and dissociative symptoms.</p>	<p>Strengths: Adequate time frame for analyzing. The yoga was highly monitored</p> <p>Limitations: Small sample size of only women, not representative of an entire population.</p> <p>Critical Appraisal Tool & Rating: <i>Evidence level 1; High quality of evidence.</i></p>

Appendix E. PTSD Toolkit**Referral groups for PTSD:**Women's Trauma Healing Group

Berkeley, California

(628) 300-3570

Description:

12-week support group for women struggling with the effects of trauma including sexual, physical and/or emotional abuse, neglect, assault and domestic violence.

Anger Management in the COVID-19 era: Online Group

Oakland, California

(510) 399-1667

Description:

Online group therapy for those that suffered through the COVID-19 crisis.

Beyond Surviving to Thriving

Berkeley, California

(510) 500-9724

Description:

Group focuses on adult survivors of childhood trauma.

Women's Healing from Relationship Trauma Group

Oakland, California

(704) 997-2065

Description:

12-week group session specializing in relationship trauma

Veteran's/Criminal Justice Family Support

Hayward, California

(510) 901-4993

Description:

Group therapy designed to help combat veterans cope with stress and Criminal Justice Family Support groups designed to help families thrive in the midst of the stress caused by a loved one's interactions with the court system.

Women's Sexual Trauma Processing Group

Berkeley, California

(510) 827-1036

Description:

Processing group therapy open to female survivors of sexual trauma.

Individual therapy for PTSD:

Mahrs Schoppman

Oakland, California

(510) 543-0663

Description:

Trauma and PTSD focused therapy for children and adults.

Elizabeth Preston

Oakland, California

(510) 876-4307

Description:

Trauma and PTSD focused therapy focusing on treating children and adults with recent and past trauma.

Medication for PTSD:

Fluoxetine (Prozac)- Start at 20mg/day. Maximum dose of 80mg/day

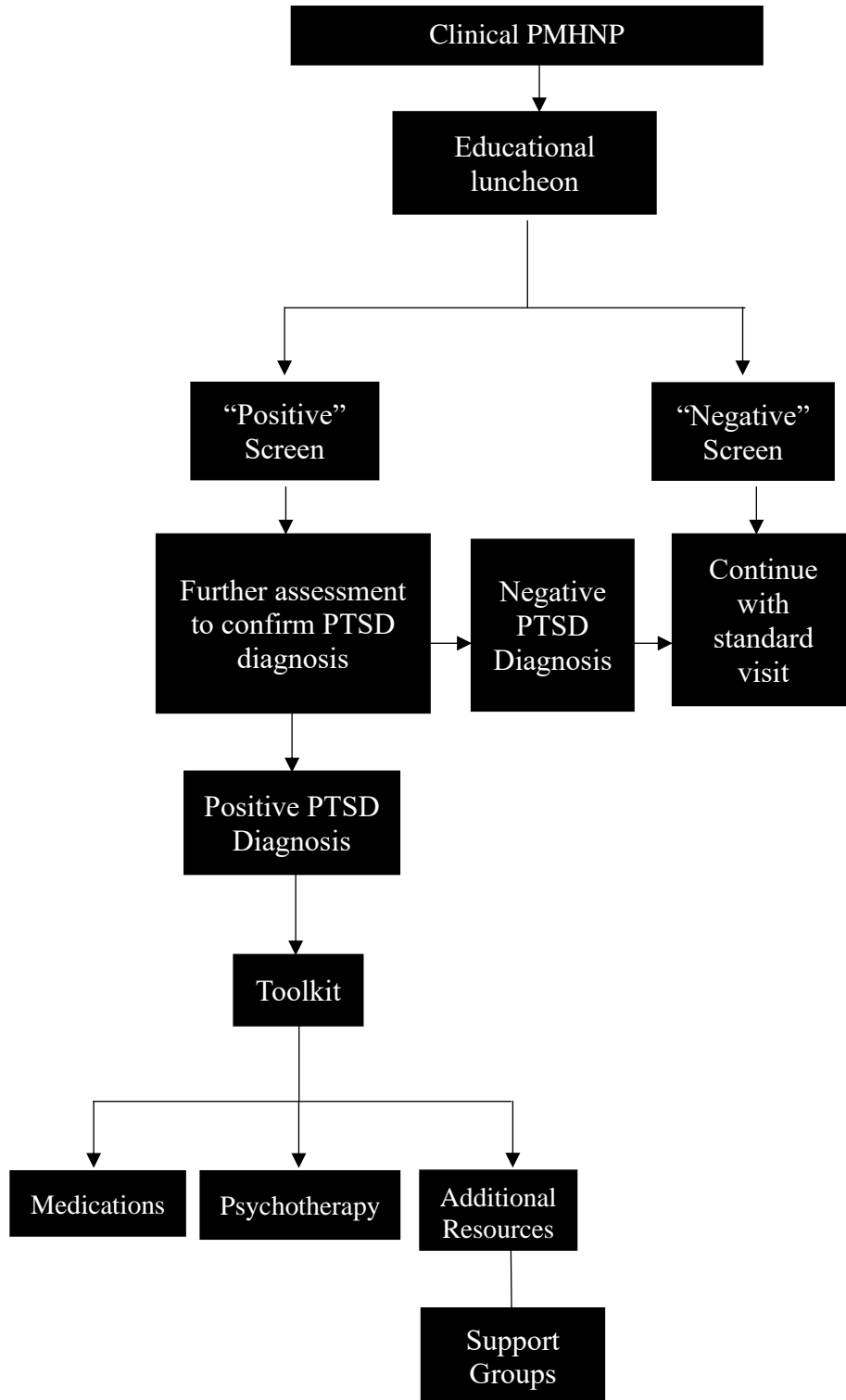
Paroxetine (Paxil)- Start at 20mg/day. Can increase by 10mg/day once a week, until a maximum dose of 60mg/day is reached.

Sertraline (Zoloft)- Start at 25mg/day. Increase to 50mg/day after 1 week. Can increase by 50mg/day thereafter, until maximum dose of 200mg/day is reached.

Appendix F. Gap Analysis

<p>Problem</p>	<p>Without educating providers on the significance of initiating a standardized screening tool for PTSD, there is a gap among identifying, diagnosing, and treating this mental illness.</p>
<p>Goals</p>	<ol style="list-style-type: none"> 1. Reduce the amount of overlooked and misdiagnosed PTSD cases. 2. Help clinicians efficiently diagnose PTSD. 3. Provide patients suffering from PTSD better QOL.
<p>Gap</p>	<p>Routinely screening for PTSD in healthcare settings, specifically outpatient psychiatric clinics, can eliminate undiagnosed PTSD and determine the root cause of psychiatric symptoms, instead of alternatively treating a misdiagnosis or one that may have been overlooked.</p>
<p>Implementation</p>	<p>Providers will be educated on the importance of implementing the PCL-5 screening tool on patients, to assess trauma. A three-hour educational luncheon hosted via Zoom will be provided. This meeting will equip clinicians with statistical information regarding current evidence-based PTSD rates, the statistical necessity of screening for trauma, how to implement the PCL-5 screening tool, and the utilization of a PTSD toolkit to better serve those who thereafter are diagnosed with PTSD. Two surveys will be conducted: one before education regarding the implementation of the PCL-5 screening tool, and one four months after education concerning implementation.</p>
<p>Evaluation</p>	<p>After education about the implementation and importance of the PCL-5 screening tool and toolkit, another survey, via Survey Monkey, will be administered to clinicians four months later. This survey will assess satisfaction, knowledge, and recent use surrounding implementation of a PTSD screening tool.</p>

Appendix H. Work Breakdown Structure



Appendix I. Responsibility/Communication Matrix

Contact Person	Frequency	Communication Method
DNP Chair Dr. Trinette Radasa	As needed	Phone, email, Zoom meetings
DNP Committee Members	As needed	Phone, text, email
Psychiatric Clinicians	One initial lunch training and one follow up lunch, post- implementation. As needed	In person, phone, email
Psychiatric Outpatient Clinic Receptionist	Twice for lunch training As needed	In person, phone, email

Appendix J. SWOT Analysis

<u>Strengths</u>	<u>Weaknesses</u>
<p><u>PROJECT:</u> Implementing PTSD screening tools is beneficial in identifying those with PTSD who would have otherwise gone undiagnosed.</p> <p>May result in less ER visits and/or hospitalizations reducing the healthcare burden costs that comes with hospital visits,</p> <p>Early detection and intervention provide better patient outcomes and enriched QOL.</p> <p><u>CLINIC:</u> The clinic has highly skilled employees familiar with treating patients with PTSD.</p> <p>The clinic has an excellent reputation and a welcoming atmosphere.</p> <p>The clinic has a steady client base.</p>	<p><u>PROJECT:</u> Reluctance from clinicians to implement another screening tool due to feelings of increased workload from having to evaluate results from said tool.</p> <p>If undiagnosed, this can result in untreated PTSD and reduce the patient’s QOL.</p> <p>Clinicians may be reluctant to revise treatment plans that include the additional diagnosis of PTSD that was not identified early in the treatment.</p> <p><u>CLINIC:</u> The clinic has a high operational cost and is small in size.</p> <p>The clinic cannot be accessed easily by public transportation.</p>
<u>Opportunities</u>	<u>Threats</u>
<p><u>PROJECT:</u> Implementing a PTSD screening tool upon the first visit allows clinicians to identify a possible PTSD diagnosis. A PTSD screening tools is not included as part of the initial visit.</p> <p>PMHNPs have an opportunity to introduce a tool that can diagnose PTSD early during treatment, that may otherwise have been delayed or found later during treatment.</p> <p>PMHNPs have the opportunity to ensure better QOL for those struggling with PTSD.</p> <p><u>CLINIC:</u> Increased treatment efficacy and revenues, increased compliance among patients/families, increase in client base, and potential expansion of clinic.</p>	<p><u>PROJECT:</u> A lack of patient and clinician participation.</p> <p>Lack of “buy-in” from organizations within the clinic.</p> <p><u>CLINIC:</u> Competition from rival business (in both public and private clinics).</p> <p>Patient compliance and drop-outs are considered threats to clinics as well as drug/alcohol abuse, along with harmful side-effects of medication.</p>

Appendix K. Proposed Budget

Budget	
Material	Cost
Binder (x5)	\$15
Pens	\$7
Printer Ink (x2)	\$90
Paper (x2)	\$40
Material Total	\$157
Lunch Provided to Clinicians for Training - 5 providers, 1 receptionist	\$240
Lunch & Material Total	\$397 ~ \$400
Time of Student	\$60/hr
Research aside from Clinical Experience (20 hours)	\$1,200
Toolkit Creation (2 hours)	\$120
Project Implementation (5 hours)	\$300
Student Time Total	\$1,620
<i>Project Total</i>	<i>~ \$2020</i>

Appendix L. 3 Year Pro-Forma/Break-Even Point/ROI

FY1 (2021-2022)		FY1 (2021-2022)	
Budget Totals	Estimated	Estimated Patient Visits	3840 per year
Materials Total	\$2,000	Estimated PTSD Visits	384 (10% of Total)
IT/RN Follow-Up Total	\$4,500	Estimated Increase in patient Visits	325 (~50%)
Total of Project	\$6,500	Estimated Profit from Increased Vists and Efficient Treatment	\$3,250
FY2 (2022-2023)		FY2 (2022-2023)	
Budget Totals	Estimated	Estimated Patient Visits	4165 per year
Materials Total	\$1,000	Estimated PTSD Visits	416 (10%)
IT/RN Follow-Up Total	\$4,500	Estimated Increase in patient Visits	208 (~50%)
Total of Project	\$5,500	Estimated Profit from Increased Vists and Efficient Treatment	\$20,800
FY3 (2023-2024)		FY3 (2023-2024)	
Budget Totals	Estimated	Estimated Patient Visits	4373 per year
Materials Total	\$1,000	Estimated PTSD Visits	437 (10%)
IT/RN Follow-Up Total	\$4,500	Estimated Increase in patient Visits	219 (~50%)
Total of Project	\$5,500	Estimated Profit from Increased Vists and Efficient Treatment	\$21,900

Break-even point	Return on Investment
Fixed costs / (revenue per visit – variable cost) = patient visits	ROI = Net profit / total investment
\$6500 / (\$100 – \$80) = \$325	50% = \$3250 / \$6500
	revenue – initial investment = net profit
	\$9750 – \$6500 = \$3250
	(Income – cost of investments) / initial investment = revenue
	\$6500 + \$3250 = \$9750
	Profit \$3250

Appendix M. Analysis Graph—1st Educational Luncheon

