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Determining the Effectiveness of a Peer Support Person in Individuals with Depression Symptoms

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This doctoral project, directed and approved by the candidate's committee, has been accepted by the College of Graduate and Professional Studies of Abilene Christian University in partial fulfillment of the requirements for the degree

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by

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Dedication

To my husband, Charles, who has been my rock and inspiration to continue on the path even when the path was not always in sight and who always believed in me. And to my children, Jarvis and Kaliah, who have stood by me watching the many nights of schoolwork and reminding me, “mommy, it’s almost over.” And finally, to my mother, the most amazing woman I have ever known. Thank you for giving me that “sheer will and determination” to believe I can achieve anything and everything!

Acknowledgments

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Abstract

This study's aim was to evaluate the effectiveness of an existing peer support program as an adjunct treatment for patients with depression. This retrospective evaluation analyzed the total scores of 110 patients with depression on the PHQ-9 questionnaire at the initial assessment (Time 1), at 6-weeks (Time 2), and then at 12-weeks (Time 3). The participants were divided into two groups, those who enrolled in a peer support program (n = 55) and those without peer support (n = 55). PHQ-9 total scores for each time interval were compared for the two groups utilizing independent sample t tests. At initial assessment (Time 1), both groups reported depressive symptoms in the moderately severe range (15-19), with a mean of 15. The two groups' total scores did not statistically differ at Time 1 prior to treatment, nor at Time 2. The two groups differed significantly ($p < .001$) on depressive symptoms at the 12-week follow up (Time 3), such that outpatients assigned to peer support had lower depressive scores ranging in the moderate range (10-14). The use of a peer support program revealed a statistically significant impact by week 12 in patients with depression. The use of a peer support program may be utilized as adjunctive therapy in the treatment of depression and should be continued for a period of at least 12 weeks.

Keywords: peer, depression, effective, support, recovery, outpatient clinic, treatment

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Chapter 1: Introduction

In 2017, the National Institute of Mental Health (NIMH, n.d.b.) estimated that 17.3 million adults in the United States had at least one major depressive episode; 11 million of those individuals had severe impairment (NIMH, n.d.b.). Depression is not limited to a series of feelings that manifest after certain situations like the loss of a job or spouse, or a significant life event. Currently, depression is the leading cause of disability worldwide (Morin, 2019). Though depression does not discriminate, it has been found to be more commonly diagnosed in women than in men and oftentimes is associated with a component of anxiety (Morin, 2019).

For one to be diagnosed with depression, they must meet specific criteria as established by the Diagnostic Statistic Manual of Mental Disorders (DSM-V, 2013). To further describe depression, clinicians can categorize it into different classifications. The most diagnosed form of depression in individuals aged 15-44 is major depression disorder (Parekh, 2017). Two specific criteria a patient must exhibit are the loss of interest in activities that were once desirable and the overwhelming feeling of sadness. Other characteristics may include:

- insomnia or hypersomnia,
- increase or decrease in appetite,
- feelings of worthlessness or guilt,
- recurrent thoughts of death and/or suicidal ideations,
- difficulty concentrating, and/or
- psychomotor retardation or agitation. (DSM-V, 2013)

These symptoms must be present persistently for at least 2 consecutive weeks. Other forms of depression are persistent depressive disorder (dysthymia), premenstrual dysphoric disorder, depressive disorder due to another medical condition, and seasonal affective disorder.

Dysthymia is a form of depression that is persistent for at least 2 years and lacks a symptom-free period longer than 2 months. Though they share the same characteristics of major depressive disorder, the symptoms are often not as severe. Premenstrual dysphoric disorder occurs in women around the time of their menstrual cycle, specifically 7 to 10 days prior to the onset and lasting up to 2 days into the menstrual cycle. Depression disorder due to other medical conditions can be from a wide array of medical illnesses or diseases that lead to specific symptoms such as hypothyroidism and cerebral vascular accidents. Finally, seasonal affective disorder is a form of depression that is experienced during a specific time, typically the winter months, which is attributed to lack of sunlight (Goldberg, 2018).

The prevalence of depression makes it a significant concern for healthcare professionals and society at large (Morin, 2019). As the leading cause of disability worldwide, with an estimated cost of $210.5 billion per year, depression can have a significant economic impact on families (Morin, 2019).

For many years, people with mental illnesses such as depression believed it was a disease that could be treated but not overcome. These individuals took on the role of the patient and disability (Mead et al., 2001). However, there has been research to show individuals with depression are capable of healing, recovering, and functioning within their communities (Tse et al., 2017). Peer support is an evidence-based service for individuals with a mental health illness. It has been shown to lower the overall cost of mental health services by reducing rehospitalizations, crisis visits, cost of medication, and the increasing cost of outpatient services (Mental Health America [MHA], n.d.).

Statement of the Problem

Major depressive disorder affects about 7.1% of the U.S. population and is the leading cause of disability amongst those aged 15-44 (NIMH, n.d.b). At a rural outpatient mental health clinic in Pennsylvania, a significant number of patients with depression were not progressing despite active treatment regimens over several years. As a result, these patients became discouraged and thus fell out of treatment, experienced worsening symptoms, and sometimes committed suicide.

One key element that could be added to the treatment options is a peer support program. These services can effectively fill some of the gaps in mental health treatment, which is supported by the literature (Aekwarangkoon et al., 2019). Peer support can be used as an alternative to traditional mental health treatment or can function as an adjunct treatment. The literature reveals evidence that peers are effective in reducing hospitalization and improving recovery outcomes (Bellamy et al., 2017; Mancini, 2017). Peer support should be another treatment option available to the patients not only at this research site but also to all patients with mental health illness.

Background

Major depression is one of the most common mental health disorders in the United States (Olfson et al., 2016). It is known as a common but serious mood disorder. Many individuals struggle with depression in silence. The death of a loved one, the break-up of a relationship, and the loss of a job are all situations that cause one to be sad and disappointed for a period of time. The individual may say they feel depressed; however, the feelings usually are short term. There are times when grief becomes depression, and the individual requires treatment. According to the American Psychiatric Association (APA, 2013), some of the

symptoms an individual may experience when they have major depression are feelings of hopelessness, helplessness, anhedonia, loss of interest in activities, lack of focus and concentration, lack of motivation, lack of energy, change in sleeping habits, and low self-esteem. Further, they may have recurrent fleeting thoughts of death.

For some individuals, major depression can result in severe impairments that make it nearly impossible for the individual to live a normal life and carry on their regular responsibilities (World Health Organization [WHO], 2019). Often the depression may progress, leaving the individual unable to work and having to apply for social security disability (Morin, 2019). Globally, depression affects more than 300 million people of all ages (WHO, 2019).

Lack of progression in depression treatment is also important because depression has many physical implications. For example, depression can lead to premature heart disease, chronic pain syndromes, inflammatory disease, headaches, gastrointestinal symptoms, etc. (Koskie, 2020). In addition, untreated or poorly controlled depression can also lead to risky behaviors such as drug and alcohol abuse (Kam, 2019). When left untreated or not effectively managed, depression can be as expensive to treat as chronic diseases like heart disease (Bhandari, 2019).

Cost

Depression is a highly prevalent and disabling disorder that can result in declining health and lost economic output. This decline in health can cause an estimated economic burden of $210.5 billion per year. Forty-eight to 50% of the cost are attributed to decrease work productivity and work absence. Another 45% of the costs are due to medical expenses, which include treatment and medications (Gans, 2020).

Healthy People 2020

One of the goals of this initiative was mental illness prevention by ensuring access to quality mental health services for all. It was noted when people were mentally healthy, they were productive in activities, had fulfilling relationships, and had the ability to change and cope with challenges. Mental health is necessary to contribute to communities and societies. There are more efforts toward the prevention of mental illness and screenings, especially in children (Essex et al., 2009).

Organizational Impact

A substantial benefit for the organization is the potential cost-savings that will occur from peer-provided services. These savings are due to decreased hospitalizations or decreased inpatient stays; in addition, peer self-help groups generally do not cost the organization very much in terms of dollars, resources, space, or benefits. In addition, peer support services may reduce the utilization of other traditional costly services (Solomon, 2004).

Technology

Millennials make up a large percent of our population and are suffering from mental illness (Farkas, 2020). This group has grown up in the technology age and uses technology to socially connect with others. This has had a negative impact on this generation. However, this can be beneficial in terms of using technology to connect with a peer support person (Farkas, 2020). Face-to-face encounters are encouraged; however, if that is not possible, the individual could use social media such as Skype, FaceTime, instant messenger, Facebook, text, Twitter, or just phone call (Shepardson et al., 2019).

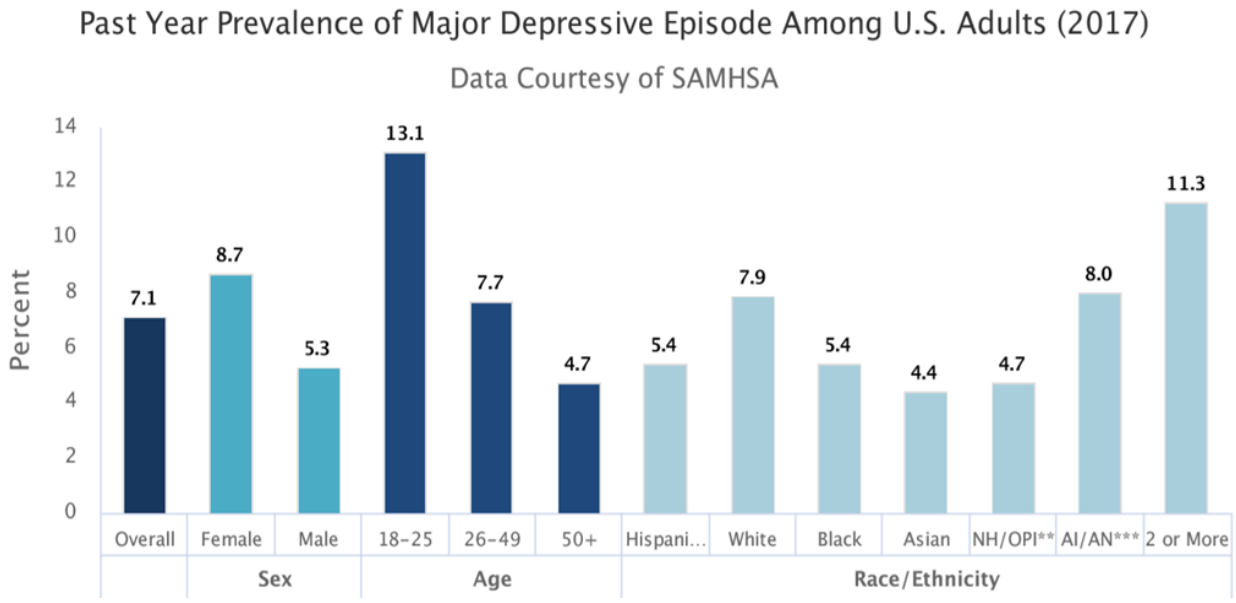
Depression can be categorized as mild, moderate, or severe. An individual can have a single episode or recurrent depression. Mild depression often goes undiagnosed or

underdiagnosed. This is because the symptoms are not considered significant enough for individuals to think they have depression. They tend to believe they are just feeling "blah." Moderate depression is more noticeable to the individual and may start to become noticeable to others. It can cause difficulties with social interactions, work, sleep, home, and family. The individual loses interest in things that once were pleasurable. Severe depression can cause significant distress and feelings of sadness, hopelessness, helplessness, low self-esteem, and guilt. Severe depression symptoms are usually detectable by anyone around the individual.

Depression can affect anyone; it does not discriminate (see Figure 1). It can affect children, teens, adults, the elderly, and any race or ethnicity (NIMH, n.d.a.). However, depression is more prevalent in women compared to men (NIMH, n.d.a.).

Figure 1

Prevalence of Major Depressive Episode Among U.S. Adults



Note. From "Major Depression," by National Institute of Mental Health, 2019. Data provided by SAMHSA are in public domain.

It can affect a person who appears to "look normal" and appears to live a normal life. The depressed person often does not look like the television commercial displays them, where they are curled up on the couch or in bed, looking disheveled and easily identified (Labeaune, 2014). Many appear like you and me, and no one knows they are struggling with depression. They go to work or school and come home and hide from others, but also themselves. They often do not recognize the person in the mirror (Labeaune, 2014).

Several factors can play a role in depression (i.e., chemical imbalance, genetics, and low self-esteem). The pathophysiology of the brain suggests that there is a chemical imbalance in the neurotransmission that contributes to depression (Dunlop & Nemeroff, 2007). Depression caused by a genetic component means that if an individual's parents have experienced depression, it is likely the individual will be diagnosed with depression at some point in their lifetime. Individuals with low self-esteem also are more likely to develop depression (Dunlop & Nemeroff, 2007). According to Dunlop and Nemeroff (2007), individuals exposed to environmental factors such as continuous exposure to violence, neglect, or physical, mental, verbal, emotional, or sexual abuse have a higher chance of developing depression in their lifetime. According to the WHO (2019), those living in poverty have a 2.5 times greater chance of developing depression than those who do not live in poverty.

The traditional methods for the treatment of depression are different forms of cognitive-behavioral therapies and the use of antidepressants (WHO, 2020). Peer support is currently used at the provider's clinical site; however, peer support is not currently used as a treatment option specifically for patients with depression.

Peer support persons are individuals who are usually paid and have mental illness themselves and have recovered to the point where they can now provide support to others

struggling with a similar disorder (Walsh et al., 2015). This has been proven thus far to be beneficial because the two can have shared living experiences, and the recovered individual can provide things such as hope, acceptance, and equality (Walsh et al., 2015). Recovery and healing are stressed with the peer support person as they both engage in the relationship. While the use of a peer support person is one treatment option that has been researched, there have been few studies on the effectiveness and utility of this relationship for depressed individuals to date.

Purpose

The purpose of this project was to determine if peer support persons were an effective adjunct treatment for patients at this rural clinic with depression who were not progressing despite active treatment regimens over several years. This was a quantitative cohort study design using convenience sampling. An independent *t* test was used as it was determined to be the best test to determine the means of two numbers. The project was specifically designed to determine if patients diagnosed with depression who were paired with peer support persons experience decreased depression symptoms, as measured over a 12-week period. In my professional work as a nurse practitioner at the study site, I have observed that peer support is currently being used in mental health care but not to specifically treat depression. Extant literature recommends the use of peer support in general mental health care and depression treatment but also recommends further research is needed (Tellez & Kidd, 2015). The use of peer support in this project is to enlarge a patient's recovery options while working alongside a peer using concepts including presence, connection, equality, acceptance, respect, and trust (Walsh et al., 2015).

Significance

According to Bryan and Arkowitz (2015), approximately one-sixth of Americans will meet the diagnostic criteria for major depressive disorder during their lives. The results from this study of peer support persons may offer another viable treatment option to patients struggling with depression. As Mead et al.'s (2001) framework demonstrated through shared experiences, the peer support person can better relate to the patient and offer more authentic empathy and validation. Also, it is not uncommon for the peer support person to offer practical advice and suggestions as opposed to strategies that are used by professionals (Mead et al., 2001).

PICOT Question

In adult patients diagnosed with depression in an outpatient setting in rural Pennsylvania, does participating in a peer support program, in comparison to usual care (without peer support), decrease depression symptoms as measured by the PHQ-9 instrument, over a 12-week period?

- P- Adults patients with depression at an outpatient mental health clinic
- I- Patient with depression symptoms matched with a peer support person
- C- Use of peer support in patients with depression as compared to patients with no peer support
- O- The effectiveness of peer support in decreasing symptoms of depression as measured by the PHQ-9 questionnaire
- T- The project was to evaluate peer support over a 12-week period

Hypotheses

Outpatient clinic patients with depression symptoms who are paired with a peer support person will report fewer depression symptoms compared to patients without peer support.

Null Hypothesis: There will not be a change in PHQ-9 scores between adult patients with peer support and adult patients without peer support.

Definition of Key Terms

Depression. Depression is a mental disorder. According to the Diagnostic Statistic Manual of Mental Disorders (DSM-V), five (or more) of the following symptoms must be present during the same two-week period and reflect a change from the patient's previous level of functioning. At least one of the symptoms must be either depressed mood or a loss of interest or pleasure, and at least one of the following symptoms:

1. Depressed mood most of the day, nearly every day reported by self or by others.
2. Markedly diminished interest in activities or pleasure most of the day, nearly every day reported by self or by others.
3. Significant weight loss or weight gain when not actively trying.
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day reported by self or others.
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness and excessive guilt nearly every day.
8. Diminished ability to focus and concentrate nearly every day.
9. Recurrent thoughts of death (not just fear of death) suicidal ideation.

Peer support person. In the context of this study, a peer support person is someone who has a personal history of mental health issues, has completed peer support training, has received a peer support certification, and is employed to assist others with mental health issues. Peer support persons provide role models of self-care and the effective use of recovery skills (Christie, 2016).

Scope and Limitations

The study population consisted of patients from an outpatient mental health clinic in central Pennsylvania, which treats a variety of patients with various mental health disorders. The inclusion criteria of this study included: adults age 18 and older, all races and sexes, patients of a central Pennsylvania outpatient mental health clinic, those diagnosed with depression and /or depression with any class of anxiety as defined by the DSM V criteria, and the ability to read, write, and comprehend written language. The exclusion criteria included: those age 17 years or younger, a diagnosis of depression with any other DSM V diagnosis excluding anxiety, current enrollment in a peer support program, current inpatient status, and the inability to read, write, or comprehend written language.

Summary

Depression is a common mental health disorder that can be difficult to treat. Some patients do not seek treatment for their disorder and continue to try to function in their homes, jobs, and schools until they are no longer able to do so. Although depression can be genetic and may be associated with environmental factors, it is still a treatable disorder. As a nurse practitioner for more than a decade in central Pennsylvania with experience working with patients' depression disorders, I believe the use of a peer support person can foster a culture of mental health ability as opposed to mental illness and disability. Patients with depression working with a peer support person may learn to live, thrive, regain hope, develop courage, and achieve recovery.

Chapter 2: Literature Review

The objective of the literature review was to provide evidenced-based support to explore the research question: Does participating in a peer support program at an outpatient clinic in rural Pennsylvania cause a statistically significant decrease in depression symptoms among adult mental health patients with a clinical diagnosis of depression, as measured by the PHQ-9 instrument over a 12-week period?

The PICO question was developed based on an identified problem at my worksite: At a rural outpatient mental health clinic in Pennsylvania, a significant number of patients with depression are not progressing despite active treatment regimens over several years. As a result, these patients become discouraged, and some fall out of treatment, some experience worsening depression, and some commit suicide.

Search Strategy and Selection

A search was conducted utilizing a variety of search engines such as Biobase, CINAHL, Cochrane, EBSCOhost, Elsevier Library, ProQuest, Google Scholar, and PsycArticles. Research articles were found using the search terms *peer*, *depression*, *effective*, *support*, *recovery*, *outpatient clinic*, and *treatment*. Articles were selected based on their relevance to my practice population, as well as relevance to the PICO question. The number of articles initially identified by the search was 17,100 results. Articles were then excluded if the research was not based on adults 18 years of age and older with depression and if the article was not published within the past 7 years (2013-2020) unless the content included classic context related to history or conceptual framework. Additional exceptions to the seven-year exclusion were pilot studies that were pertinent journal articles related to the POI or if the article contained duplicate information. This number was refined based on the level of evidence and quality, which further reduced the

number of research articles to 125. Research articles and results were maintained in binders and organized according to topics.

Conceptual Framework Discussion

Mead et al.'s (2001) peer support framework was used as the conceptual framework guiding this study. Mead et al.'s framework was selected because it defines the elements that, when reinforced through education and training, provide a culture for healing and recovery. This culture is important because individuals who have been labeled with a mental health disability have been stigmatized and have developed the patient identity, which is negative (Burke et al., 2018). In contrast, a culture for healing and recovery equips members of peer support to understand the cultural forces that lead to personal change, social change, and relational change (Walsh et al., 2015). The consumer movement seeks social justice through an understanding of mental illness and freedom from psychiatric diagnosis (Mead et al., 2001).

Early in the consumer model, mental health was viewed as a disease to be treated by professionals, which eliminated the outside factors such as abuse, trauma, poverty, and any form of loss (Mead et al., 2001). This traditional approach was founded on the belief that patients with mental illness would not recover; they would just function in society. Mead et al. (2001) believed if researchers could move beyond mental illness as a permanent disability and explore the relationship of peer support to help with recovery, this would provide a viable option for patients. This would allow mental health professionals to change the way they view mental illness and perhaps lay the foundation to understand mental illness and recovery. Peers understand patients with mental illness can and do recover, and they are not a forever mental patient (Mead et al., 2001).

It is possible to have professionally active mental health patients (Mead et al., 2001). Therefore, the primary goal of peer support in Mead et al.'s framework is to responsibly address the individual's mental illnesses and, at the same time, to validate the individual for who they are and where they have come from. Most treatment modalities for mental health are focused on treatment but do not address recovery; however, Mead et al.'s (2011) theoretical model focused on recovery, which is the ultimate goal of the treatment. For this study, the purpose was to provide the participants with another viable option in addition to the traditional treatment options that are currently available to them to offer healing and recovery.

Defining Peer Support Within This Framework

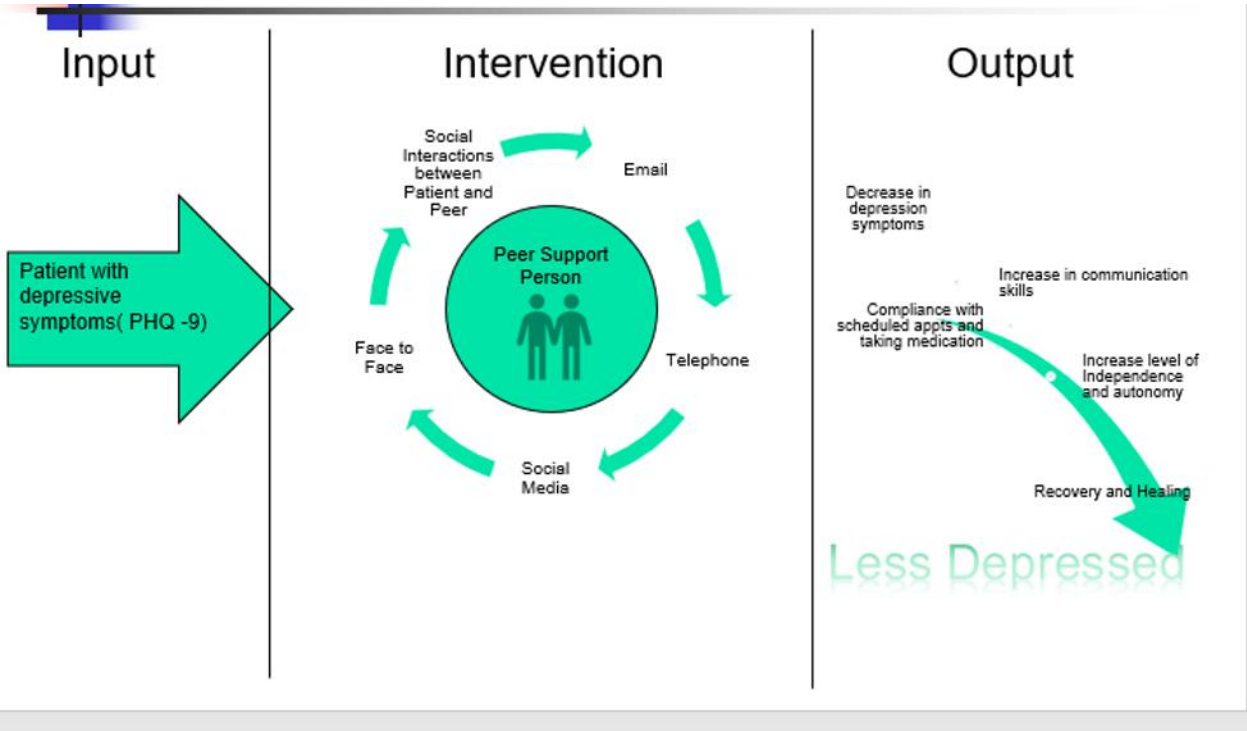
Peer support is derived from a system of giving and receiving support founded on three key principals: respect, shared responsibility, and mutual agreement of what is helpful. This is a broad term because the interventions are worked out as the relationship forms. When patients work with individuals they deem are like them, they tend to form a bond faster and more naturally. Peer support is nonjudgmental, and it allows both individuals to be themselves. Peer support is a move toward autonomy, empowerment, and hope for the patients. It is not based on deficits whereby patients are forced to see themselves as defective as society would have them think. Rather, this is a framework of inclusion that encourages diversity and recognizes individuals' strengths and works to develop the weaknesses. Peer support is a nontraditional treatment that allows individuals with a history of mental illness to change their label from mental patients to clients who can and will recover one day from their mental illness.

To further explain Mead et al.'s (2001) framework, individuals with depressive symptoms complete a Patient Health Questionnaire (PHQ-9) assessment (see Figure 2). There is an interaction that takes place between the individual and the peer support person via various

forms of communication. The outcome is an increased level of autonomy, increased communication skills, compliance, and a decrease in depression symptoms, recovery, and healing (Mead et al., 2001).

Figure 2

Peer Support Framework by Donna Reeves Based on Interpretation of Mead et al.'s (2001) Framework



Historical Overview

Davidson, a professor of psychiatry at Yale University, traced the beginning of peer support as far back as 18th-century France (Tang, 2013). The governor of a hospital in Paris, who had a mental illness, recognized the value of employing recovered patients as hospital staff to work in an inpatient unit at a mental hospital. The chief physician praised these peer support staff for being "gentle, honest and humane" (Tang, 2013, p. 1128).

Peer support in mental health has been occurring for over 100 years. Mental Health America was established in 1909 by a former psychiatric patient by the name of Clifford Beers (Mental Health America, 2020). During his admissions in mental institutions, he witnessed and was also subjected to inhumane treatment and abuse by the staff at the facilities. From these experiences, MHA was birthed. Peer support is about understanding another's situation empathically through the shared experience of both emotional and psychological pain. The goal of the organization was to improve the attitude of society toward individuals with mental illness and to improve services that are available for individuals with mental illness. Finally, the organization aimed to work with communities in the promotion of mental health.

Self-Medicating

When patients with depression are not progressing despite active treatment regimens over several years, they tend to self-medicate with drugs and/or alcohol to relieve themselves of emotional pain (Yoho, 2019). Interestingly, both alcohol and most drugs used to medicate are usually drugs that make depression symptoms worse (Kam, 2019). While it may seem like it works for a while, eventually, it will further complicate the situation and make depression worse (Kam, 2019). While most of these individuals may choose to self-medicate with alcohol or drugs initially because they are looking for a short-term fix or relief from symptoms of depression, many of them continue to self-medicate until they slip into dependency and the dependency slips into addiction (Yoho, 2019). According to the Substance Abuse and Mental Health Services Administration (2018), other possible reasons could be shame or an attempt to hide mental illness. The individual may not have the money for treatment or access to treatment.

Physical Symptoms Caused by Depression

When an individual has persistent depressive symptoms, they are at risk for other problems such as physical illnesses and can have symptoms such as chronic pain, weight changes, and increased inflammation (Trivedi, 2004). Patients with depression can also be at an increased risk for heart disease due to decreased motivation, unhealthy eating habits, and sedentary lifestyles (Villines, 2018). These individuals are often victims of bowel issues such as diarrhea, constipation, or irritable bowel syndrome (Koskie, 2020). Koskie (2020) also stated that these changes are due to the brain's response to stress levels, and the brain responds by suppressing activity in the hypothalamus, pituitary, and adrenal glands. Another physical symptom is the loss of libido due to loss of interest in relationships (Villines, 2018). Individuals who are depressed tend to isolate themselves and are less likely to engage in intimate relationships (Koskie, 2020).

As noted earlier, I treat a variety of patients at the outpatient facility. The research was conducted at this facility due to convenience and accessibility. Much of the population are Caucasian. Other patients are Latino, Hispanic, elderly, veterans, adolescents, and children. For the purpose of this research study, the subjects were 18 and over. Peer support should begin a process of building affiliation, but it certainly should not end there (Mead et al., 2001).

The peer support literature supports various forms of encounters such as face-to-face, social media, phone calls, and texting; however, Pfeiffer et al.'s (2017) study showed peer support persons who were further along in recovery and had face-to-face interactions had better outcomes. A pilot study by Pfeiffer et al. (2017) examined 48 patients who were recently discharged from an inpatient mental health unit who were considered high-risk patients for readmission and adverse outcomes. The patients were provided with peer support that was either

trained peer support, a family member, or a friend. The patient was instructed to call an automated system to report their symptoms weekly. If they had worsening symptoms, and they had a family or friend peer support, the peer was contacted and instructed to contact the patient and arrange a face-to-face encounter. If symptoms persisted, the patient was provided an appointment with their mental health provider. If the patient had a trained peer support person, they were to use their formal training to respond to the symptoms the patient was experiencing. If the symptoms persisted, the patient was given an appointment. The results revealed decreases in depression symptoms as well as effective use of the automated phone system.

Young Adults

Young college students are a vulnerable population who are at risk for mental illnesses such as depression and increased suicide risk. Funkhouser et al. (2017) conducted a research study with a population experiencing significant mental health challenges at a Connecticut college. The focus was on mental health issues among college students, which is widely regarded as a public health problem in the United States.

In this study, a survey of undergraduate students revealed that 1.6% had attempted suicide, and 8.0% had seriously considered suicide within the last 12 months (Funkhouser et al., 2017). This study evaluated the effects of a peer depression outreach program for college students known as the Depression OutReach Alliance (DORA). DORA differs from other depression suicide prevention programs largely because it is implemented by a peer leader. Fifty-six students participated in the study. They watched a 16-minute video of college students who had experienced depression and suicidal ideation but were now in recovery with support from peers and mental health professionals. Students were also given a notebook in which to write about any self-help topics. They were given a pretest, posttest, and follow-up assessment.

However, the results did not show that students were more likely to engage in this program or to seek mental health treatment. This study had several limitations, one of which was some students were lost to follow-up when the semester ended. The researchers concluded that further research was needed to evaluate DORA and peer-to-peer support. Many challenges are involved in the development of peer support services. Careful training and management of individuals involved are required for the best outcomes.

Horgan et al. (2013) performed an evaluation of an online peer support forum of college students with depression symptoms in 2013. The study involved individuals 18-24 years old experiencing depressive symptoms. The website provided a forum for participants to offer peer support to each other. Questionnaires were collected regarding web design preferences and types of questions to be asked. The website went live and was able to be accessed by the general public (students). Participants were recruited from one university by email, and over 12,000 were sent. This was the target population. Nonprobability convenience sampling was utilized. The sample consisted of 118 students, of which 64% were male, and 98% were white, which is similar to the university's profile. The conclusion from the pre and posttest study revealed no statistical significance. The most recorded symptom by the participants was loneliness. The limitation of the study was the small sample size. However, this study concluded that online provided a unique, affordable place for students to have peer support if they wanted to utilize the service for depression.

Ethnicity

Latinos make up more than 16% of the total population and are the largest and fastest-growing minority population in the United States (Vanderkruik & Dimidjian, 2019). This group typically faces several challenges, such as unemployment, poverty, language barriers, and

discrimination. Latinos' depression is often seen as a weakness or shame, and Latinos tend to underutilize mental health services and terminate care prematurely.

Vanderkruik and Dimidjian (2019) attempted to address the treatment gap in the United States between mental health services received by Latina mothers and mothers who are non-Latino and White. Latino women are usually part of a remarkably close community and tend to stay to themselves. In this study by Vanderkruik and Dimidjian (2019), patients wanted peers who were bilingual in Spanish and English as well as being bicultural, and all participants had a positive opinion of peer-delivered services, yet they had concerns as to how to recruit and retain women in the program. Latinos put their families first and themselves last. Mothers want to ensure that peers are people who are ethical and confidential. In this study, many of the participating mothers reported that it would be important for them to have someone with whom they would feel comfortable discussing personal issues. Mothers preferred face-to-face peer support as opposed to phone or internet intervention. One of the major concerns in this study was that several of the participants wanted to ensure referrals were made in case a patient's depression became too complicated for a peer to handle. A limitation was the small sample size, which was obtained by convenience sampling and referrals from the community (Vanderkruik & Dimidjian, 2019). Latinos, as an ethnic group, represent a limitation of the study.

Aging Adults

According to Ho (2007), depression is becoming common in older adults. This group is at high risk for suicide: aging is a vulnerable process in life at a time when adults experience stressful events in their lives such as the death of a spouse, loss of a child, deterioration of physical health, loss of independence, and loss of home or residence (Ho, 2007). These

patients struggle with depression later in life. In this two-year study of 75 elderly individuals with depression symptoms living in a community in Hong Kong, participants were administered a health screening exercise conducted in local communities and were referred by social workers. The peer counselors were housewives or retirees, ages 50-60, living in the same vicinity and trained by a mental health nurse. They attended several hours of training. The studies showed that older adults could be effectively trained and utilized to serve older patients struggling with depression within their communities.

Peer counselors for this population were local people with similar backgrounds, including ethnic and social backgrounds, like those of the patients to whom they were providing support. This study revealed potential benefits from peer counseling but also suggested that the practice with the elderly should be better researched in the future (Ho, 2007). Clearly, the stigma of mental illness affects youth and also the elderly and is a barrier to treatment among the elderly population.

Another study by Chapin et al. (2013) evaluated a mental health peer support program for older adults who received Medicaid. There is a stigma and lack of access to providers, which creates barriers to mental health treatment for older adults. Therefore, the purpose of the study was to address the barriers and develop and evaluate a peer support intervention for older adults receiving Medicaid. The design of the study was reclaiming joy as the intervention, which would pair an older adult on Medicaid with a volunteer (peer support). The two met for 10 weeks and worked toward shared goals. The study results included 32 participants who completed the pre- and posttest, which revealed a statistically significant improvement in depression symptoms. A limitation of this study was the pilot project did not allow for a random selection of patients to be assigned to control groups.

In a feasibility study by Seeley et al. (2017), 62 older adults between the ages of 55 and 96 years of age randomly participated in a research study that examined the use of cognitive behavior therapy and peer support. Peer support interventions for depression have received increased attention. This study showed that support services were able to be delivered by phone, face-to-face, and via the internet. Peer workers working with older adults were asked to use workbooks to target areas and elicit change. Peer support showed favorable results in reducing depression symptoms when compared to usual care; however, there was no significant difference when compared to cognitive behavioral therapy. The feasibility study had several limitations of note, such as the small sample size and limited racial and ethnic diversity.

Veterans

Peer support is also utilized within the Veterans Health Administration system and has proven to be beneficial with the military population, especially due to the cohesiveness of the team approach. In a study by Shepardson et al. (2019), 24 individuals were recruited from veteran facilities in central New York, as well as regions of the Midwest. This was an exploratory descriptive qualitative study. The veterans favored peers who had experienced a mental health condition. They also favored a peer who had been trained and certified by a VHA-approved training organization (Shepardson et al., 2019). Shepardson et al. (2019) also examined peers in primary care to help address both medical issues and mental health issues. According to Shepardson et al. (2019), peer support goals included providing and promoting healing, coping skills, shared life experiences, recovery stories, and instilling hope and trust. This study revealed that more stakeholder buy-in is needed as the next step in future research and that support has been an untapped resource (Shepardson et al., 2019). Some of the challenges in this study were role confusion, staff resistance, and a negative attitude toward

peers. However, the VA system needs to take this treatment technique seriously due to the rapid growth of peer support not only in mental health but also in the primary care setting. The researchers indicated the importance of ensuring that peer support supervisors have adequate training, program development, funding, and any needed resources.

According to Clark et al. (2016), the concept of people with similar lived experiences supporting others in recovery was important to the veteran; however, there was no firm consensus on what life experiences were required for the support person to be considered suitable or effective. This study was designed to ascertain the characteristics a patient would consider to be important from his or her peer support specialist. The study involved 41 participants in a jail diversion program for veterans. They were asked to rank questions in order of importance. This study provided guidance as to who should be a peer support specialist; it was found that this should vary depending on the population that would be served.

Valenstein et al. (2015) indicated that process and structure should be individualized and tailored to the needs of the patient, just as medical care is individualized. When people feel depressed, they tend to isolate themselves, and communication can often become a challenge. In the Valenstein et al. (2015) study, 443 patients receiving treatment at a veteran's hospital over a six-month period were randomly assigned to study groups and instructed on how to dial in to speak with an assigned peer. Participants were encouraged to communicate at least once a week for the duration of the study. The study concluded that more professional peer support models helped participants get further along in their recovery, and those who had pursued face-to-face interventions may be more likely to experience a reduction in symptoms. This study also concluded those who engaged in peer support were further along in recovery and those who utilized face-to-face encounters usually had better outcomes.

Internet

In an important decade-long study by Melling et al. (2011), peer support and internet access were examined, with a special focus on face-to-face peer support for mental health disorders. The aim of online peer support services is to provide individuals with support and compassion and to help them build self-esteem, feel empowered, and develop coping skills (Melling et al., 2011). According to Mead et al. (2001), as trust in the relationship builds, both individuals are able to respectfully challenge each other when they are in conflict. The efficacy of online peer support services would be best determined by measuring therapeutic changes as opposed to clinical outcomes in symptom reduction (Melling et al., 2011). In a longitudinal research study evaluating online peer support services, findings revealed a reduction in depressive symptoms. In this study, 93% of participants received treatment for depression either through therapy or medication along with peer support. A limitation of the study was the researchers' failure to use a control group for comparison. The inconsistent findings indicated that additional research is needed to evaluate the efficacy of online peer support services, specifically for individuals with depression.

Peer Administered Intervention (PAI)

Many community mental health centers have implemented peer treatment models that employ individuals who are in recovery from their mental health and who have recovered to a point where they are ready to help someone else who is struggling with depression. Bryan and Arkowitz (2015) conducted a study on depression symptoms. This study referred to peer administered interventions (PAIs) who were paraprofessional therapists. They typically do not have a mental health history, formal training in mental health, or personal experience with the problems they are treating. Treatments provided by PAIs have shown promise. These services

are different from the traditional peer support as they do not need personal experience with the mental health disorder they are treating (Bryan & Arkowitz, 2015). The comparison indicated that engagement with PAIs reduced depression symptoms compared to non-peer-administered interventions and no-treatment conditions. Overall, this represents a positive treatment option for depression. One of the limitations was a clear distinction in the role of peer support versus a PAI. The conclusion was that while engagement with PAIs is a positive treatment option for depression, more research is needed in this area.

Peer Group

A clinical study was conducted in Iran at Fasa city's Vali-E-Asr Hospital between October 2015-April 2016. Seventy patients who were undergoing coronary angiography (cardiac catheterization) were selected by random sampling and divided into experimental and control groups. The experimental group received instructions by two patients who had recently undergone the same procedure just a few days prior to the two groups, while the control group received routine instructions from the nurses in the department. Researchers concluded that utilizing peer-group education is effective in reducing the symptoms of depression. The control group had fewer depression symptoms and less anxiety than the control group. It appears that patients felt more comfortable with the people who had the procedure just days prior (Molazem et al., 2018).

Conclusion

Is peer support effective in reducing the symptoms of depression? According to the review of the literature, it has been effective in reducing symptoms of depression in all studies. Peer support is a system of giving and receiving help that is founded on three key principles: (1) respect, (2) shared responsibility, and (3) mutual agreement on what is helpful for the patient.

Peer support can offer a culture of health and recovery as opposed to a culture of illness and disability (Mead et al., 2001).

The studies all shared favorable results, including the reduction in depression symptoms when paired with a peer support worker. A few studies concluded that patients wanted peers with backgrounds similar to their own. This was especially important to two populations in particular: veterans and Latinos. Latinos also had a high prevalence of dropping out of treatment prematurely. One of the limitations for veterans was that the results were not generalizable. Other limitations included sample sizes and the lack of diversity in samples. Veterans did far better when paired with a veteran with shared experiences. All studies concluded that further research was needed.

Summary

Although depression is the most common mental health disorder, it is often hidden and undertreated. Heart disease has been identified as a silent killer, but depression should share that reputation. While there are several treatments for depression (Molazem et al., 2018), some individuals are reluctant to seek treatment due to the stigma associated with mental illness.

There are many different treatments for depression. One treatment that has been studied is the use of a peer support person, which has proven to be effective with depression symptoms. The literature points to favorable outcomes from the use of a peer support person, including, most importantly, the reduction in depression symptoms. Peer support can take several forms, but the literature indicates better outcomes with face-to-face encounters than any other form of communication.

There was not much difference in the populations studied. Certain studies were chosen due to the representation of patients served at the this outpatient clinic in central Pennsylvania.

As stated, two populations are similar. When asked to evaluate what was of greatest importance in peer support, they both responded in similar ways. What was most important to them was their peer support person, who must have shared life experiences with them. The DORA study involved college students, and the study proved the DORA intervention had a lot of potential as a screening tool. However, it needs to be studied further due to the high prevalence of student turnover. Group peer support is becoming more popular due in part to the small number of peer support staff. This allows a peer support person to serve more people at a time. Peer support is about normalizing what has been named as abnormal due to other people's discomfort (Mead et al., 2001).

Chapter 3: Methods

Depression has become a public health problem (WHO, 2019) due to its prevalence and potentially negative impact on personal and financial outcomes (McLaughlin, 2011). According to Goldberg (2018), approximately 30% of persons diagnosed with depression also suffer from other medical conditions compared to those without depression. Therefore, with this growing need for mental health interventions, I recognized the treatment gap between the patients diagnosed with depression and lack of recovery.

For patients with depression who are not progressing despite active treatment regimens at this clinic, mental health treatment becomes costly to the organization as well as the patient. As patients continue in treatment for depression year after year, it limits the volume of new patients that can be accepted into the clinic due to having a limited supply of providers. The treatment often becomes costly to the patient in prescriptions and possible copays. Current treatment options have not been effective; therefore, a reevaluation of the treatment options was needed in order to provide effective care.

Data Collection, Management, and Analysis Plan

The purpose of this study was to determine the effectiveness of an existing peer support program for patients with depression. A review of the literature has concluded benefits to patients who have worked with a peer support person; similarly, peer support was associated with positive effects such as empowerment, hope, and recovery (Lloyd-Evans et al., 2014). Peer support has also been effective in identifying needs, overcoming perceived societal handicaps, and bringing about social and/or personal change.

The facility where the researcher is employed gave approval for the research (see Appendix C). The study population consisted of adult patients at an outpatient mental health

clinic in central Pennsylvania. The inclusion criteria were adults age 18 and older; any race or sex; patients of this central Pennsylvania outpatient mental health clinic; diagnosed with either depression or depression with any class of anxiety, as defined by the DSM V criteria; and able to read, write, and comprehend written English. The exclusion criteria were (a) being age 17 years or younger; (b) diagnosed with any other DSM V diagnosis besides depression or anxiety; (c) currently enrolled in a peer support program; (d) current inpatient status; and (e) unable to read, write, or comprehend written English. Patients who chose to participate in a peer support program were partnered with a designated peer support person via local agencies whose employees are trained peer support personnel. Three different peer support agencies were selected based on convenience because they already had a working relationship with this outpatient mental health clinic. However, the peer support service utilized at the study site was limited and underused by onsite practice providers.

Participants were recruited using convenience sampling. Convenience sampling was selected to allow me, as the researcher, to perform the research at my work site and have access to patients who were otherwise difficult to access. I recruited 110 patients who met the inclusion criteria. This number was calculated by using an online sample size calculator to compute the sample size for an independent sample *t* test (Statistical Decision Tree, 2020). A *t* test was selected because it is the best test to determine if there is a statistically significant difference between the means of two groups, which may be similar (Statistical Decision Tree, 2020). A *t* test allowed the researcher to test the hypothesis and any assumptions regarding the study.

The data manager at the study site queried patients with a diagnosis of depression from January 1, 2019 to December 31, 2019. Then a de-identified list was created with the total scores

of the initial assessment (Time 1), at 6-weeks (Time 2) and at 12-weeks (Time 3) of the PHQ-9 questionnaire scores. Another column was provided to indicate if the patient participated in a peer support program. The data were divided into two groups. The data are owned by the university and maintained at the university in the event access is needed at a future date. The data will be maintained for a minimum of 3 years, which was determined by the IRB guidelines (Abilene Christian University [ACU], 2019).

Instruments and Measurement Tools

The Patient Health Questionnaire (see Appendix A) was used in this project and was developed as a quick screening tool for depression for use by healthcare providers in office settings (Jain, 2020). Depression is a prevalent disorder often seen by a wide spectrum of providers, including primary care providers, mental health providers, OBGYNs, and surgical specialists (Simon et al., 2013). Because of this prevalence, a team working at the New York State Psychiatric Institute and Department of Psychiatry created the PHQ-9 to screen for depression; the team included Kurt Kroenke, Robert Spitzer, and Janet Haveiams (Kroenke et al., 2001). The questionnaire utilized was a brief 9-question screening tool. It can either be self-administered or can be administered by the clinician in a variety of settings. The PHQ-9 is in the public domain and freely available for use. This 9-point self-questionnaire measures responses ranging from not at all, several days, more than half the days, and nearly every day. Once completed, the numbers were totaled, and the level of depression was determined:

- 1-4 Minimal
- 5-9 Mild
- 10-14 Moderate
- 15-19 Moderately severe

- 20-27 Severe

The PHQ-9 has become the standard measurement tool in major depression based on its reliability (Jain, 2020). It differs from other screening tools because it contains nine items that meet criteria from which the diagnosis of depression is based, according to the DSM-V. It has also been proven to be a reliable screening tool for depression (Jain, 2020). In a study conducted by Kroenke et al. (2001), the PHQ-9 was completed by 6,000 patients in eight primary care clinics and seven obstetrics-gynecology clinics. The aim of this study was to examine the validity and reliability of the PHQ-9 questionnaire. The study found that the PHQ-9 had a sensitivity of 88% and specificity of 88% in screening for major depression (Kroenke et al., 2001). These results concluded the PHQ-9 was a reliable tool with both reliability and specificity. It can usually be completed within 5 minutes, and it is convenient to use as it can be completed by the patient while sitting in the office. Also, the PHQ-9 is an inexpensive assessment tool to use.

Feasibility and Appropriateness

The project was conducted at my practice site, which is an outpatient mental health clinic. The project was a retrospective chart review, which was of no cost to the organization. The PHQ-9 is a standard of practice used at the practice site. The de-identified data were queried by the data manager and given to the researcher.

Interprofessional Collaboration

Mental health is an example of how interprofessional collaboration can work for the good of the patients. This project demonstrated how the facility collaborates with several agencies that provide peer support. Mental health providers also collaborate with a patient's primary care providers and any other specialist that may be providing care for the patient. There is also

collaboration among the organization (stakeholder) and the provider. It is of utmost importance that this feed of communication continues to work so the providers can continue to deliver the highest quality of care.

IRB Approval and Process

This researcher completed the NIH Protecting Human Subject Research Participants online training during academic enrollment. Permission to conduct the study at the project facility was obtained in writing by my place of employment (see Appendix C).

The study was revised prior to IRB submission due to the COVID-19 pandemic and resultant changes in patient care to meet the Centers for Disease Control recommendations. Due to this, the project facility limited in-person clinic appointments and instead performed telehealth visits. As a result, a de-identified query of retrospective data was performed instead. The revised project was submitted and approved for a Nonhuman Review on 7/17/2020, # 20.082, by the ACU IRB committee at Abilene Christian University (see Appendix B).

Practice Setting

The research project took place at an outpatient mental health clinic in rural Pennsylvania. This facility is a Federally Qualified Health Clinic (FQHC). I chose this setting because of the large number of patients, as well as convenience and accessibility. This practice employs registered nurses, secretaries, nurse practitioners, psychiatrists, and therapists. This practice also works with Uber to provide transportation to patients who need transportation to appointments. It also works in affiliation with other facilities that provide resources for the patients, such as peer support services, case management, family base, Families in Crisis (FIX), the partial program, and outpatient therapy.

Risks and Benefits

There were minimal risks involved in this study. The participants were patients at an outpatient mental health clinic, and the methods used in the study are standard of care for this facility (which is the study site). Patients at this outpatient clinic can consent for themselves. The content and context of peer support communication may pose a privacy risk (Naslund et al., 2016). The benefits of peer support, according to the literature, are reduction in depression symptoms, autonomy, empowerment, shared decision making, acceptance, hope, and recovery.

Timeline

The start date was immediately after IRB approval. Contact was made with the data manager at the study site, who provided a de-identified list with the project variables. This information was presented to me within 1 week. It took 2 days to put the information into an Excel spreadsheet to prepare the data to run the analysis (see Appendix D).

Summary

Depression is a global problem that requires a global response. Without hesitation, public awareness of mental health is growing (Becker-Haimes, 2018). However, despite public awareness, there remains a challenge. Individuals in need of mental health treatment often labor to receive timely and effective treatment, especially if located in a rural area (Becker-Haimes, 2018). The lack of treatment significantly contributes to the increase in suicides (Trimyer, 2019). According to Trimyer (2019), the lack of access to mental health treatment facilities has created a crisis that negatively affects every community and every family, regardless of where they live. Therefore, according to the Essentials of the Doctor of Nursing Practice V and VII, there need to be more policies made for mental health screening and prevention. Mental health screening

should become more robust as research has indicated depression is on the rise among millennials (Curley, 2019).

This project has determined the effectiveness of existing peer support programs within the study site for participants with depression using the PHQ-9 assessment tool. The study took place at my place of employment and measured data over a 12-week timeframe. I was hopeful the outcome would support the positive effects of peer support services, and this would afford patients another viable treatment option for depression. This would also allow the patients to progress from illness to recovery.

Chapter 4: Findings

Purpose of the Project

The purpose of this project was to determine if peer support persons are an effective adjunct treatment for patients with depression at a rural clinic in central Pennsylvania, as measured by PHQ-9 over a 12-week period.

Summary of Results

The office manager (not the researcher) at the study site performed a query of the database for patients with depression from January 1, 2019 to December 31, 2019. They generated a de-identified list with total PHQ-9 questionnaire scores measuring initial, 6-week, and 12-week results. Another column indicated if the patient had received peer support or no peer support. A total of 110 participants were identified, and all were included in the project.

- Time 1 (initial)
    - Peer support program cohort (n = 55) had a mean PHQ-9 score of 16.5.
    - No peer support program cohort (n = 55) had a mean score of 16.7.
    - The total score at Time 1 was not statistically different, $p > .05$.
- Time 2 (6-week)
    - Peer support program cohort (n = 55) had a mean PHQ-9 score of 15.0
    - No peer support program cohort (n = 55) had a mean PHQ-9 score of 16.0
    - The total score at Time 2 was not statistically different, $p > .05$
- Time 3 (12-week)
    - Peer support program cohort (n = 55) had a mean PHQ-9 score of 12.9
    - No peer support program cohort (n = 55) had a mean PHQ-9 score of 15.6
    - The total score at Time 3 was statistically significant at $p < .001$

Data Analysis

The data analysis was performed using the statistics software IBM SPSS Version 26. An independent sample *t* test was performed to compare the mean of two groups. Three separate *t* tests were completed: initial, 6-week, and 12-week. The results were confirmed by ANOVA. No covariates were available to include in the analysis. The PHQ-9 total scores can range from zero to 27. Scores from 1-4 indicate minimal depression, 5-9 mild depression, 10-14 moderate depression, 15-19 moderately severe depression, and 20-27 severe depression.

Figure 3 shows the PHQ-9 scores for the two groups (peer support program and no peer support program) at the three assessments. As a preliminary analysis, separate between-group *t* tests were conducted for each time. At Time 1, the initial assessment, both groups reported depressive symptoms in the 15-19 range, which is the moderately severe range. The peer support program cohort (n = 55) had a mean score of 16.5, and the no peer support program cohort (n = 55) had a mean score of -16.7, $p > .05$ (i.e., which was not statistically significant).

The two groups did not differ on depressive symptoms at the six-week (Time 2) follow-up, which were still in the moderately severe range (15-19). The peer support program cohort (n = 55) had a mean score of 15.0, and the no peer support program cohort (n = 55) had a mean score of 16.0, with $p > .05$ (i.e., which was not statistically significant).

Interestingly, the two groups did differ on depressive symptoms at the 12-week follow-up (Time 3), such that outpatients assigned to peer support had lower depressive scores and scored in the moderate range (10-14). The peer support program cohort (n = 55) had a mean score of -12.9, and the no peer support program cohort (n = 55) had a mean score of 15.6, with $p < .001$, which is statically significant. Outpatients who did not receive peer support continued to report

depressive symptoms in the moderately severe (15-19) range at Time 3. Table 1 provides a visual representation of the change over time in depressive symptoms for the two groups.

Table 1

Depressive Symptoms (PHQ-9) Over Time as a Function of Peer Support

	Peer Support			No Peer Support			
Time	Mean	*SD*	Range	Mean	*SD*	Range	*t* (108)
Initial	16.5	3.6	8-25	16.7	3.0	10-23	< 1
6-Week	15.0	3.4	8-25	16.0	3.0	10-22	1.66
12-Week	12.9	3.2	8-24	15.6	3.4	9-22	4.28*

Note. N = 110; 55 patients received peer support, and 55 did not.

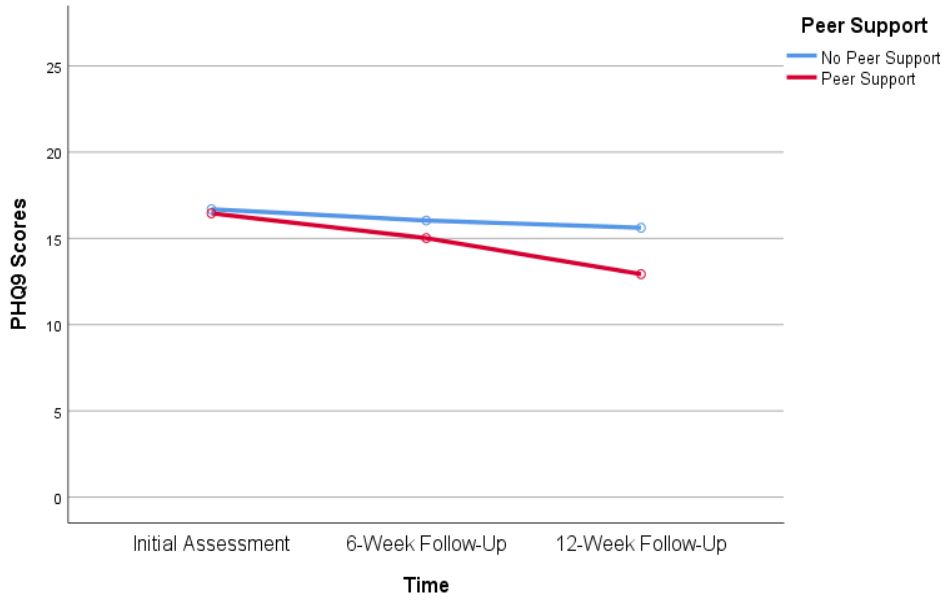
*$p < .001$.

Because patients provided responses on the PHQ-9 at three points over time, a repeated measures ANOVA was conducted for a formal test of the central hypothesis. This design has greater statistical power than a series of *t* tests conducted separately because the analysis controls for differences between respondents.

There was a significant main effect of Time on depressive symptoms [$F(2,107) = 77.62$, $p < .001$], a significant main effect of Peer Support [$F(1,108) = 4.80$, $p < .05$], and a significant Time x Peer Support interaction [$F(2,107) = 23.04$, $p < .001$]. The significant interaction indicated that the depressive symptoms differed over time between the two groups (see Figure 3). The separate *t* tests above indicated that consistent with the central hypothesis, patients in the peer support program reported lower depressive symptoms at the 12-week follow-up compared to patients who did not participate in peer support.

Figure 3

Graphic Display of Depressive Symptoms (PHQ-9) Over Time



PICOT Question

In adult patients diagnosed with depression in an outpatient setting in rural Pennsylvania, does participating in a peer support program, in comparison to usual care (without peer support), decrease depression symptoms, as measured by the PHQ-9 instrument, over a 12-week period?

Hypotheses

The hypothesis was outpatients diagnosed with depression who elected peer support would report lower depressive symptoms compared to outpatients who did not elect peer support. Building a relationship between patient and peer would be crucial to successful outcomes, and relationship building requires investing time.

Limitations

One limitation of the project was that all of the participants were from one mental health outpatient clinic, which makes the project nongeneralizable. Additional limitations were the limited time period and small sample size.

Conclusion

The project findings supported the hypothesis that those outpatients with peer support reported fewer depressive symptoms within 12 weeks than those with no peer support in the same reported time. It is interesting that both groups reported moderately severe (15-19) PHQ-9 total scores at the initial and 6 weeks intervals (Time 1 and 2). At the end of these two time periods, there was not a statistically significant difference ($p > .05$). The statistically significant difference occurred at week 12, when the depression symptoms were decreased (10-14), moderate depression ($p < .001$). This suggests the longer the peer support was performed, the better outcome of depression symptoms.

Chapter 5: Discussion of Findings

Depression is the most common mental health illness in the United States, and it has affected more than 88,000 additional people in 3 months in the United States as a result of the COVID-19 pandemic (MHA, 2020). Many Americans were quarantined, which led to isolation and further caused depression symptoms. Those individuals with children found themselves having to homeschool their children, which caused stress and anxiety and left untreated transitions into depression.

Adults with a history of depression who are in treatment at the outpatient mental health clinic in central Pennsylvania have not been able to come to the office for face-to-face visits. They have had telehealth visits. This has not been the ideal setting for many patients; however, it has at least been an option that the facility has been able to offer the patients. Many of the patients who had reported their depression symptoms as stable in the past reported their symptoms as moderate or severe due to the recent pandemic. Healthcare providers are seeing unprecedented times, and it appears to have had a significant impact on mental health (MHA, 2020).

The findings of my project support the hypothesis that patients have fewer depressive symptoms when they have peer support than those without peer support. This will become even more important as healthcare workers move forward with the new normal after COVID-19. Peer support has been another treatment option that can be offered to patients who have been treated for depression with traditional treatment, such as with antidepressants, but, despite the treatment, still seem to have depression symptoms. I would recommend peer support for any patient with depression symptoms post COVID-19. Patients can be educated regarding the benefits of peer support with the expectation of seeing improvement in depression symptoms between 6 and 12

weeks. This should provide encouragement for those individuals that have particularly struggled during the pandemic and have been isolating themselves, which caused worsening depression symptoms. Relationships are vital in everyday life, which is why isolation is not recommended for patients with depression. In mental health, healthcare providers encourage patients to engage in relationships with family, friends, and coworkers in good times and in bad times. This concept of relationship is what peer support is founded upon. The peer support specialist works with the patient sharing their life experiences and is able to communicate in ways that have made this evidence-based practice a continually growing field. The outcome from this project supports the use of a peer support program in patients with depression and reveals patients involved with peer support for 12 weeks will have fewer depression symptoms.

Implications

Depression affects millions of individuals every year, and the numbers continue to increase (MHA, 2020). The pandemic and people social isolating has made depression symptoms worse. It has drawn the attention of politicians and policymakers to respond to those crying out for help. Individuals who have a diagnosis of depression has always been thought of as the forever patient. This project has demonstrated that patients paired with a peer support person can expect fewer depression symptoms between 6-12 weeks. Some of the research that needs to be continued should be if some of these individuals could be placed with a peer as soon as depression symptoms begin and before medication is initiated.

Essentials of Doctoral Education for Advanced Practice

Nurses Essential 1: Scientific Underpinnings

An individual cannot be physically well if they are not well mentally. Mental health is a public health issue that affects every aspect of a person's life. Doctoral-level nurses are prepared

to identify these individuals who are at risk and those who are diagnosed with depression using the PHQ-9 questionnaire. They can start intervention early, including adding adjunct use of peer support therapy.

Essential 2: Organizational and Systems Leadership for Quality Improvement and Systems Thinking

Peer support was proven to decrease depression symptoms. Developing a care delivery approach to meet the needs of the patient, based on the project findings, can further improve the quality of care and patient safety at this outpatient mental health clinic. A decrease in depression symptoms will result in patient satisfaction, which will increase revenue for the organization.

Essential 3: Clinical Scholarship and Analytical Methods for Evidence-Based Practice

The findings of the project have shown that peer support decreased the symptoms of depression between 6-12 weeks. These findings indicate peer support is another viable option to supplement the usual treatment used for depression. This project also reveals further research is needed to further evaluate covariates.

Essential 4: Information Systems Technology and Patient Care Technology for the Improvement and Transformation of Health Care

Peer support is based on communication with the patient. In order for peer support to be effective, there must be a connection. The connection is made via face-to-face, phone, text, email, Zoom, or FaceTime. This has also been beneficial since the pandemic as healthcare providers have had to use this technology to do telepsychiatry.

Essential 5: Health Care Policy for Advocacy in Health Care

Depression has been a global problem for years, and it continues to rise since the start of the pandemic. The advanced practice nurses are aware they are looking at another problem with

the number of people who are isolating themselves due to COVID-19, which contributes to depression. The advanced practice nurse can start initiatives for minimizing isolation, initiating social distancing activities, and building relationships, which will decrease depression and anxiety.

Essential 6: Interprofessional Collaboration for Improving Patient and Population Health Outcomes

Working in mental health involves a display of collaboration of many resources and disciplines. Many of the patients have multiple providers requiring many needs. This project also demonstrates that this facility has a collaboration with three agencies that provide peer support services. The goal of interprofessional collaboration is to improve the quality of care and improve patient outcomes.

Essential 7: Clinical Prevention and Population Health for Improving the Nation's Health

This project revealed how using peer support will improve depression symptoms, which will improve the patient's overall health.

Essential 8: Advanced Nursing Practice

As a psychiatric nurse practitioner, my investigation and evaluation of peer support in this project were based on evidence in the literature. Findings from this project revealed evidence-based results to help guide providers to another viable treatment option to be used as an adjunct therapy along with traditional treatment for patients with depression symptoms (American Association of Colleges of Nursing, 2006).

Recommendations for Future Research

Depression is the leading mental health illness and is a major cause of suicide. It is an illness that many patients struggle with in treatment for many years with little to no

improvement. The patient should be paired with a peer supporter with similar backgrounds and similar mental illness. Connectedness and the relationship between the patient and the peer is vital for peer support to be effective and to have a positive outcome. If the relationship is a positive one, the patient will feel comfortable opening up and talking to the peer in a more expedient time period if at all. It is important to question the patient to inquire what type of peer they would feel more comfortable with, such as male/female and any other factors they feel would be important to look for in a peer or any characteristics they do not want in a peer. My recommendations for peer support are three-tiered: (1) utilize face-to-face communication, (2) utilize a signed patient contract, and (3) utilize patient self-reporting during the scope of treatment at each patient visit.

Face-to-face communication should be utilized, if possible. However, there are times when this may not be possible, so an alternative method should be explored. According to the literature, patients who had face-to-face encounters had better outcomes (Valenstein et al., 2015). Understanding that patients live in a social media age, there is a population that may feel more comfortable with phone calls, FaceTime, or texting. I would also recommend frequent communication at least once a week if not more often. This would have to be established at the initial meeting between the patient and the peer support person. This is also dependent upon the patient's insurance plan as to what they will authorize.

A signed contract/collaboration between the patient, peer support person, the patient's mental health provider and the PCP should be required. This can provide continuity of care, and the providers need to be aware of the progress the patient is making and what interventions are taking place. It will also identify any areas that may need to be further explored.

Lastly, patient self-reporting, utilizing the PHQ-9 self-questionnaire, should be completed by the patient at least every 12 weeks since this was the time period when positive results were confirmed. Further, peer support should be continued for at least 6 months to achieve maximum results.

Conclusion

Approximately one sixth of Americans have met the diagnostic criteria for major depressive disorder during their lives (Bryan & Arkowitz, 2015). The results from this study of peer support persons may offer another viable treatment option to patients struggling with depression. The peer support person through shared experiences can offer hope, empowerment, and greater levels of self-efficacy. Also, it is not uncommon for the peer support person to offer practical advice as opposed to strategies used by professionals (Mead et al., 2001).

Recommendations for future research would include patients with depression having a face-to-face encounter with a peer support person at least once a week in conjunction with traditional treatment. The peer should be paired according to the needs of the patient. The patient should sign a release of information form. Also, the patient should complete a PHQ-9 self-questionnaire form at the initial visit and every 12 weeks since the results occurred at 12 weeks. Peer support should continue for at least 6 months if the patient's insurance permits.

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Appendix A: PHQ-9

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME:_____ DATE:_____

Over the last 2 *weeks,* how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite — being so figety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3
	add columns		+	+

(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card). TOTAL:

10. If you checked off *any problems,* how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all _____ Somewhat difficult _____ Very difficult _____ Extremely difficult _____

A2663B 10-04-2005

Appendix B: IRB Approval Letter

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
325-674-2885

July 17, 2020

Donna Reeves
Department of Nursing
Abilene Christian University

Dear Donna,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "Determining the Effectiveness of a Peer Support Person in Individualswith Depression Symptoms as Measured by the PHQ-9 Instrument, Over a 12-week Period",

(IRB# 20-082)is exempt from review under Federal Policy for the Protection of Human Subjects as:

☐ Non-research, and
☑ Non-human research

Based on:
The research does not involve interaction or intervention with living individuals, and the information being collected is not individually identifiable. [45 CFR 46.102(f)(2)]

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs

Appendix C: Approval Letter from Facility

June 28, 2019

RE: [redacted]

On June 13, 2019, the [redacted] committee, functioning in its role as the institutional review board for the Network, approved the proposed doctoral research project submitted [redacted] entitled "Depression and Peer Support" in the pursuit of Doctorate of Nursing Practice through Abilene Christian University School of Nursing.

[redacted] of Directors accepted the recommendations of the Clinical Issues Committee and similarly approved the project effective June 26, 2019.

Respectfully,

[redacted] MD
Chief Medical Officer

[redacted]

Appendix D: Research Project Timeline

	2020											
Activity	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**
IRB approval							X					
Write and print information letter												
Print consent Form												
Print PHQ-9 sheets												
Code PHQ-9 sheets												
Begin study							X					
End Study							X	X				
Analyze data								X				
Submit paper for publishing									X			