Use of a Depression Screening Measure: Perspective of Clinicians in a Mental Health Clinic

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ABSTRACT

The purpose of this DNP project was to explore clinician perspectives on the utilization of evidence-based depression screening measures during client intake at a psychiatric clinic. A cross-sectional, 15-item survey was developed and administered with a convenience sample of clinicians at a psychiatric clinic. The survey item development was guided by the Prochaska and DiClemente (1983) Transtheoretical Model and previous research. Eight participants of the eligible 15 staff members completed the paper-based survey. Participants included advanced practice registered nurses, a licensed clinical social worker, and a licensed mental health counselor. Most (seven clinicians, 87.5%) participants reported depression was a "very significant" problem for new adult clients. Most (six clinicians, 75%) participants indicated they had considered utilizing an evidence-based depression screening measure as part of their intake process. All eight participants indicated they would feel comfortable administering and scoring the Patient Health Questionnaire-9 (PHQ-9) after receiving training. Several resources were identified as needed by participants for successful administration, including training and screening measure availability in multiple languages. Further investigation at the clinic will be needed to develop clinician training and determine the optimal evidence-based depression screening measure to use during the intake process of an adult client.

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Introduction

Depression is a common worldwide disease that affects 3.8% of the world's total population, including approximately 5.0% of adults and 5.7% of adults over the age of 60 (World Health Organization, 2021). Two hundred eighty million people are currently living with depression worldwide (World Health Organization, 2021). In the United States, the percentage of adults with depression in 2020 was 8.4% or an estimated 21 million people (National Institutes of Mental Health, 2022). Identifying depression early is crucial, and evidence-based screening measures for depression have proven to be reliable and valid for use in recognizing depression. Using such measures can assist practitioners in confirming their assessment findings and provide documentation to support patient treatment. Screening measures can be incorporated feasibly into a medical visit to ensure screening takes place according to both the United States Preventive Services Taskforce (USPSTF) and the Centers for Medicare and Medicaid Services (CMS) guidelines (Akincigil & Matthews, 2017). Yet, screening rates and the use of screening measures remain shockingly low, which makes it imperative to understand why practitioners fail to use evidence-based depression screening measures (Akincigil & Matthews, 2017).

Epidemiology of Depression

Depression affects women at higher rates than men, occurring at 5.1% and 3.6%, respectively (World Health Organization, 2017). Gender differences remain similar in the U.S., with females experiencing higher rates of depression at 10.5% compared to 6.2% in males (National Institute of Mental Health, 2022). Racial differences are also present in the United States, with Caucasians reporting the second-highest rate of depression at 9.5%, followed by Hispanics at 7% (National Institute of Mental Health, 2022). The highest rate of depression is

15.9% and it is reported amongst adults who identify their racial background as having two or more races (National Institute of Mental Health, 2022).

The prevalence of depression is lower in low-income countries and higher in high-income countries (Kessler & Bromet, 2013). Kessler and Bromet (2013) noted that survey results indicated that where prevalence rates of depression were highest, participants had the lowest levels of impairment related to their depression. Conversely, areas where prevalence rates of depression were lowest, impairment was greatest (Kessler & Bromet, 2013). They added that these high impairment rates from low-income countries may reflect lower levels of reporting due to patients not seeking care. Differences in practice and criteria for diagnosing depression may also affect prevalence rates in some countries. The result is that only the most severe cases of depression may be diagnosed and treated (Kessler & Bromet, 2013).

The COVID-19 global pandemic posed significant social issues as well as physical and mental health issues (Morin et al., 2021). Morin et al. (2021) reported a higher-than-normal depression rate of 23.1% in participants who were in 13 countries across four continents. Participants in Asian countries reported lower rates of depression than European and North American countries (Morin et al., 2021). Quarantined individuals reported higher levels of depression and anxiety, at 26.47% and 70.78%, respectively (Tang et al., 2020). Conversely, individuals living in communities with mandatory COVID-19 screening reported lower levels of depression and anxiety (Tang et al., 2020).

Consequences of Depression

One of the leading causes of disability throughout the world is depression (World Health Organization, 2021; Kessler & Bromet, 2013). The World Health Organization identified

depression as the fourth leading cause of disability in 2013 and predicted that depression would rapidly move to the second-leading cause of disability (Kessler & Bromet, 2013). In the United States, mental health disorders are the leading cause of disability (Office of Disease Prevention and Health Promotion, 2021). Statistics show that for adults with depression in the United States, up to 15% of years lived will be in less-than-ideal health due to depression (National Center for Complementary Health and Integrative Health, 2021).

Major depressive disorder is associated with a wide variety of chronic conditions, including pain conditions, cancer, diabetes, cardiovascular disease, hypertension, cancer, respiratory conditions, arthritis, and asthma (Kessler, 2012; Amos et al., 2018). These findings have been validated in studies all over the world, highlighting the significant impacts depression can have on one's health (Kessler, 2012). According to Kessler (2012), depression appears to be a causal risk factor contributing to the development of chronic health conditions, including increased mortality risk. Additionally, comorbid depression worsens symptoms and health outcomes of chronic conditions, leading to increased disease burden and disability (Moussavi et al., 2007; Amos et al., 2018).

The five most frequently noted chronic conditions associated with depression are hypertension, diabetes, pulmonary disease, hypothyroidism, and obesity (Amos et al., 2018). Other diseases identified in the literature as being associated with depression include anemia, seizures, Parkinson's disease, sleep apnea, deficiencies in vitamin B12 and folate, human immunodeficiency virus (HIV), syphilis, and Lyme disease (Park & Zarate, Jr., 2019). Successfully treating some illnesses may result in remission of depression (Park & Zarate, Jr., 2019).

One in ten adults around the world are obese according to the World Health Organization (Paulitsch et al., 2021). Studies have shown that the farther an individual is from their ideal BMI, the higher the probability of developing depression (Paulitsch et al., 2021). According to Paulitsch et al. (2021), an increased BMI diminishes an individual's body image and self-esteem, which increases the risk of developing depression. Depression combined with obesity increases the risk of developing diabetes and hypertension, two other leading comorbid conditions associated with depression (Paulitsch et al., 2021).

Overall, adults with obesity are statistically more likely to experience depression than their non-obese counterparts (Pratt & Brody, 2014). Pratt and Brody (2014) noted obesity was found to be more prevalent in women with depression in the United States compared with men, which correlates to overall depression statistics. When adjusted by race, non-Hispanic Black and Mexican American men and women had no significant differences in rates of depression compared to their non-depressed counterparts (Pratt & Brody, 2014). Conversely, non-Hispanic white women had a significantly increased rate of depression, with almost 45% of obese white women experiencing depression compared to 32% of non-obese white women (Pratt & Brody, 2014). With obesity rates currently around 40% and depression rates having increased in 2020 by 14.8%, screening for depression is essential during all medical office visits (Office of Disease Prevention and Health Promotion, 2021; Jia et al., 2021).

The American Diabetes Association recommends regular screening for depression for all patients with diabetes (Owens-Gary et al., 2018). This recommendation resulted from research showing that diabetic patients with depression were at increased risk for poor disease management and poor health outcomes, as well as increased mortality (Owens-Gary et al., 2018). Owens-Gary et al. (2018) noted an increased risk of developing microvascular complications

such as retinopathy and nephropathy when a patient has depression (Owens-Gary et al., 2018). Additionally, they noted that diabetic patients with depression are twice as likely to be nonadherent to their medication regimen, leading to unsatisfactory health consequences. Somatic symptoms of depression can mimic physical symptoms of diabetes (Owens-Gary et al., 2018). Without proper screening to identify the root causes of symptomatology, patients can go without essential treatment, further complicating the course of their diabetes (Owens-Gary et al., 2018).

Depression often leads to a "self-perpetuating cycle in which a chronic medical illness negatively affects the level of function, leading to depression and anxiety, which, in turn, can worsen the underlying medical condition" (Fattouh et al., 2018, p. 592). Hypertension is a chronic medical illness and one of the leading causes of morbidity and mortality worldwide (Wang et al., 2021). Factors like poor follow-up, low treatment rates, poor adherence to medication treatments, and lack of motivation in patients with hypertension have all been linked to depression (Wang et al., 2021). According to Wang et al. (2021), depression has also been associated with uncontrolled hypertension in patients, making it vital to identify and treat it.

Chronic obstructive pulmonary disease (COPD) has a worldwide prevalence rate of 11.7% in adults over the age of 30 (Sohanpal et al., 2020). COPD is associated with high rates of comorbid depression and anxiety, leading to increased morbidity and mortality (Sohanpal et al., 2020). Depression in COPD patients, which occurs in about 30% of patients, decreases short-term survival rates and increases hospital admissions and length of stays (Sohanpal et al., 2020; Folb et al., 2015). Depression has also been associated with increased risk of death amongst COPD patients (Sohanpal et al., 2020; Folb et al., 2015).

Hypothyroidism is associated with many symptoms that mimic depression, including fatigue, hypersomnia, and issues with concentration and focus (Siegmann et al., 2018). This

finding highlights the importance of standard thyroid function screening when assessing patients for depression (Siegmann et al., 2018). Like other chronic conditions, hypothyroidism can increase dysfunction in the nervous and immune systems, which in turn can increase the risk of developing depression (Wu et al., 2021). Depression increases the likelihood that patients will not follow their treatment plan, increasing their risk of complications as well as their morbidity and mortality (Wu et al., 2021).

Untreated depression can lead to suicide (American Psychiatric Association, 2013). Suicide is currently the 10th leading cause of death in the United States (American Foundation for Suicide Prevention, 2021). In 2019, there were an estimated 1.38 million suicide attempts (American Foundation for Suicide Prevention, 2021). While women may have higher rates of depression, men who attempted suicide died at over three times the rate of women who attempted suicide (American Foundation for Suicide Prevention, 2021). White men have the highest suicide rates, with almost 70% of suicides in 2019 in the United States being completed by white men (American Foundation for Suicide Prevention, 2021).

Economic Effects of Depression

Economic effects of depression extend beyond the costs seen by society (Kessler, 2012). Kessler (2012) notes most mental health disorders have an early age of onset, which can impact many developmental transitions that occur in an individual's life. Four areas of significant development have been studied extensively, including education, marital timing and stability, childbearing, and occupation (Kessler, 2012).

Major depressive disorder appears to be associated with 60% increased odds of failure in secondary school, compared with the success rates of non-depressed individuals (Kessler, 2012).

Educational attainment or lack thereof can have significant impacts on an individual's life and the lives of their children (Kessler, 2012; Dubow et al., 2009). A parent's educational level when their child was age eight impacts the child's occupational and educational successes up to 40 years later (Dubow et al., 2009). The lower a parent's educational level, the greater the deficits that are seen by their child (Dubow et al., 2009, Sharp et al., 2021). Currently, schools all over the world are focusing on improving the wellbeing of students by providing both healthcare and mental health services as a means of improving academic success, thus changing the outcome for these children (O'Reilly et al., 2018).

Depression has multiple effects on employment status (Kessler, 2012). Depression is considered a risk factor for job loss (Kessler, 2012; Tibubos et al., 2021). However, job loss is a risk factor for developing depression (Kessler, 2012; Tibubos et al., 2021). This is especially important for those with an increased risk of recurrent depressive episodes (Kessler, 2012). Mental illness that is present at the time an individual completes school is a predictive indicator for unemployment and work disability (Kessler, 2012).

Financial success can also be impacted by major depressive disorder (Kessler, 2012, Tibubos et al., 2021). Failure to complete higher education due to depression leads to fewer occupational opportunities with reduced income availability (Kessler, 2012). Job loss and continued unemployment is another factor limiting financial successes (Kessler, 2012, Tibubos et al., 2021). Kessler (2012) noted that childhood depression seems to be the most significant risk factor to lower financial success, highlighting the importance of early identification and early treatment of depression.

Depression is the leading cause of disability in the United States (Greenberg et al., 2015). Representing almost 400 million disability days per year, depression cost the United States $83

billion dollars in the year 2000, and those costs increased to over $210 billion in 2010 (Greenberg et al., 2015). According to Kuhl (2021), almost half of these costs represent absenteeism. Additional costs include reduced productivity and direct medical costs (Kuhl, 2021). Researchers determined that 45% were direct costs, which included medical and pharmaceutical costs to the patient (Greenberg et al., 2015). Additionally, it was determined that 5% of the costs were associated with suicide (Greenberg et al., 2015).

Direct costs associated with major depressive disorder are not solely attributed to depression (Greenberg et al., 2015). Sixty-two percent of costs are associated with medical conditions often found to be comorbid with depression, including anxiety and adjustment disorders, as well as posttraumatic stress disorder (Greenberg et al., 2015). Chronic pain, sleep disturbances, and other non-psychiatric conditions also contribute to these costs (Greenberg et al., 2015). It is estimated that every dollar of direct costs for major depressive disorder equals $1.55 of workplace costs and $2.13 of comorbidity costs (Greenberg et al., 2015). Proper diagnosis and treatment of major depressive disorder would increase direct costs overall, but indirect costs and comorbid costs would decrease proportionately (Greenberg et al., 2015).

Missed work and absenteeism are not the only workplace costs associated with depression (Greenberg et al., 2015). Presenteeism is another huge cost associated with major depressive disorder (Greenberg et al., 2015). Presenteeism is the loss of productivity when employees are present at work (Greenberg et al., 2015). Presenteeism accounts for 77% of all workplace costs associated with depression, and this cost has continued to increase (Greenberg et al., 2015). Upwards of 30 workdays can be lost due to the wasted productivity of workers with depression (Greenberg et al., 2015).

Other Costs of Depression

Marital issues, including unhappiness and conflict, are highly correlated with depression (Kessler, 2012; Tibubos et al., 2021). Men and women are affected equally by depression during marriage (Kessler, 2012). Depression appears to have bidirectional effects due to the fact that depression can be the cause of marital issues, but marital issues are a risk factor for depression (Kessler, 2012). Depression as well as the presence of other mental illnesses prior to marriage is a strong predictor of marital victimization and violence (Kessler, 2012). These factors make depression in one or both spouses a risk factor for divorce (Sbarra, 2015).

Relationship satisfaction has a strong predictive factor on a person's mental health (Røsand et al., 2012; Goodman et al., 2019). Depression has the opposite effect on a marriage and one spouse's depression can increase depressive symptoms in the other spouse (Røsand et al., 2012; Goodman et al., 2019). One spouse's health issues can also increase depression in the other spouse (Røsand et al., 2012). This pattern leads to emotional distress and marital dissatisfaction (Røsand et al., 2012; Tibubos et al., 2021).

Depression also has significant effects on childbearing and parental interactions (Kessler, 2012; Baldisserotto et al., 2019). During pregnancy, depression can lead to adverse effects on the baby, including preterm delivery and low birth weight (Røsand et al., 2012). Preterm birth can lead to lifelong complications for the child, including cognitive impairments, special education needs, mental illness, and conduct issues (Baldisserotto et al., 2019).

Long-term effects of depression on children whose parents experience depression include reduced quality of parenting (Kessler, 2012). Negative parental-child interactions and relationships can contribute to the development of major depressive disorder in both adolescence and young adulthood (Goodman et al., 2019). The result is a cycle of depression that is challenging to break and can be passed down through the generations (Goodman et al., 2019).

Punitive discipline by parents and impaired parent-child relationships are linked with greater incidence of antisocial behaviors and association with antisocial peers (Goodman et al., 2019). These behaviors can lead to legal issues that can affect long-term education and financial success (Bodden et al., 2018).

Depression during adolescence has been associated with school absenteeism, learning problems, and poor school performance (Bodden et al., 2018). Adolescents with depression at age 15, whose mothers had depression, experienced greater impairment with household and work responsibilities at age 20 (Bodden et al., 2018). Depression may contribute to an increased rate of teenage pregnancy, due to the association between depression and reduced contraception use, as well as increased sexual activity (Kessler, 2012; Bodden et al., 2018).

Risk Factors

Depression is a bimodal disease (Park & Zarate, Jr., 2019). This means it commonly first appears during one of two distinct periods in a person's life, the twenties or the fifties, making both ages risk factors for the development of depression (Park & Zarate, Jr., 2019). Gender and racial background are additional contributing risk factors (Park & Zarate, Jr., 2019; U.S. Preventive Services Task Force, 2016). Several socioeconomic risk factors have also been identified, including individuals who are undereducated or unemployed (U.S. Preventive Services Task Force, 2016).

Decreased social support can increase feelings of isolation, which increases the risk of developing depression (Fattouh et al., 2018). Depression can impair relationships, leading to separation and divorce, by causing apathy and social withdrawal (Fattouh et al., 2018; Park & Zarate, Jr., 2019). Chronic illness and hospitalization are also risk factors for the development of

depression (Amos et al., 2018; Park & Zarate, Jr., 2019). Other risk factors include smoking, illicit substance use, poor nutrition, and vitamin D deficiency (Lee et al., 2020).

Mental health illnesses often co-occur with depression, necessitating the need for comprehensive assessment (Park & Zarate, Jr., 2019). A family history of psychiatric illness, including major depressive disorder, increases an individual's risk of developing depression (Park & Zarate, Jr., 2019). Anxiety, substance misuse, borderline personality disorder, and psychotic symptoms are risk factors for depression and may predict a poorer outcome for patients (Park & Zarate, Jr., 2019). Stress and a history of trauma have also been identified as risk factors contributing to depression (Park & Zarate, Jr., 2019).

Risk factors for pregnant and postpartum women include low self-esteem, child-care stress, anxiety, decreased social support, history of depression, previous postpartum depression, lower socioeconomic status, and unintended pregnancy (U.S. Preventive Services Task Force, 2016). Depression and dementia are the two most prevalent mental health disorders in the older adult population (Yu et al., 2022).

Risk factors for older adults include poor health status, disability, chronic sleep disturbance, loneliness, and a history of depression (U.S. Preventive Services Task Force, 2016). Depression in older adults increases their risk of Alzheimer's disease, vascular dementia, poor self-care, suicidal ideation, and diminished quality of life (Yu et al., 2022). Older adults are also more likely to be hospitalized than younger individuals, which increases their risk of depression (Fattouh et al., 2018).

Health Disparity: Depression Prevalence, Recognition, and Treatment

Many individuals in the United States come from a diverse racial background and no longer identify as a singular race (National Institute of Mental Health, 2021). The highest rates of depression in the United States are found in individuals who identify as being from two or more races (National Institute of Mental Health, 2021). Individuals identifying from two or more races represent 13.7% of the population and are almost 1.5 times more likely to suffer from depression (National Institute of Mental Health, 2021). This statistic highlights the need for racial demographic information that allows patients to select more than one option to improve identification of this risk factor (National Institute of Mental Health, 2021). American Indians and Alaskan Natives represent the next highest racial demographic affected by depression at 9.4% (National Institute of Mental Health, 2021). This is followed by Caucasians, Hispanics, African Americans, Asians, and finally Native Hawaiians or other Pacific Islanders (National Institute of Mental Health, 2021).

Disparities in the diagnosis and treatment of mental health disorders exist, with Caucasians receiving the highest levels of diagnosis and treatment (American Psychiatric Association, 2017). Multiple factors contribute to this disparity, which stems from a lack of cultural understanding (American Psychiatric Association, 2017). Stigma, language differences between the healthcare provider and the patient, the willingness of patients to reports symptoms, cultural understanding of illness, and access to care are all contributing factors (American Psychiatric Association, 2017). Asians have the lowest rates of diagnosis and treatment out of all ethnic groups and, even with access to care and resources, are the least likely to utilize treatment for depression (American Psychiatric Association, 2017).

Cultural Issues Regarding Depression

Symptoms associated with depression vary from country to country and culture to culture (Kessler, 2012; Goodmann et al., 2021). Differences in a person's exposure to stress, as well as their coping mechanisms, may explain part of these differences (Kessler, 2012; Tibubos et al., 2021). Depression has long been known to affect the affluent at higher rates, which may be explained by the increased rate of other chronic conditions associated with depression seen in this population (Kessler, 2012). Additionally, treatment gaps exist between lower socioeconomic countries and higher ones, and these gaps have significant impacts on outcomes for patients (Evans-Lacko et al., 2018).

South African studies have examined the disparity of income and its effects on mental health and mental health services. Folb et al. (2015) noted that individuals who live in poverty are at an increased risk of developing depression due to increased social, emotional, and financial burden. This risk is inherent to the environment impoverished people live in, an environment which is full of adversity and stress (Folb et al., 2015). These same individuals, once burdened by depression, have a decreased ability to obtain educational success and meaningful employment (Folb et al., 2015). Poverty is then maintained, making healthcare services challenging to obtain and therefore enabling depression and mental illness to persist (Folb et al., 2015).

In South Africa, higher-income individuals suffering from similar mental illnesses to their lower-income counterparts have less burden related to their diagnosis (Folb et al., 2015). These individuals have the financial resources to seek diagnosis and treatment of their mental health disease as well as any comorbid conditions they may have (Folb et al., 2015). Financial resources allow for multidisciplinary approaches to care, which can increase chances of remission (Folb et al., 2015). The South Africa results also show that individuals with lower

income rates may have higher numbers of mental health illness than reported (Folb et al., 2015). This trend may be an indication of an inability to be diagnosed due to lack of resources to access healthcare (Folb et al., 2015).

In China, the World Health Organization found the prevalence rate of depression to be 4.6%, however most experts agree this is probably a gross underestimate (Goodmann et al., 2021). Stigmas are associated with mental illness in China, which prevents many from seeking diagnosis and treatment for conditions like depression (Chang & Chen, 2021). According to Chang & Chen (2021), mental illness is still viewed by many as a source of shame or weakness in one's character. Many Chinese will present to their regular physicians with somatic symptoms due to a societal acceptance in China of the "sick role" versus mental illness (Goodmann et al., 2021, p. 227).

For Latin American individuals, the prevalence of mental health illnesses ranges from 18% to 25%, with depression presenting a major burden of disease for most individuals (Goodmann et al., 2021). Stigma is also a major factor barrier for seeking diagnosis and treatment in Latin America, due to long-held cultural beliefs that external sources like "malevolent forces" or "personal transgressions" are the causes of mental health illness (Goodmann et al., 2021, p. 228). Lower levels of education, combined with cultural beliefs, increase this misconception and misunderstanding about the roots of mental illness (Goodmann et al., 2021). Goodmann et al. (2021) also observed Latin American people tend to use linguistic and cultural expression of distress, as well as somatization, as a means of expressing psychological disorders.

A study conducted by the World Health Organization in 2016 found that one in twenty individuals between the ages of 15 and 49 in India suffered from depression, and over a quarter

of a million Indians died by suicide in 2012 (Goodmann et al., 2021). These staggering figures highlight the issues across South Asia, where depression and other psychological symptoms are still met with high levels of stigma and shame (Dubreucq et al., 2021). There is a shortage of research on depression regarding the general population in South Asia, with most current works focusing on individual groups, like women and LGBTQ individuals (Goodmann et al., 2021). Additionally, the lack of awareness by governments has allowed negative policies regarding mental illness to be suggested, like a law proposed in India to impose a fine and jail time for individuals who attempt suicide (Goodmann et al., 2021).

Community syndrome is a "phenomenon in which unstable social and political systems lead to an increased rate of mental and physical illness" (Goodmann et al., 2021, p. 228; Averina et al., 2005; Sørgaard et al., 2013). Since the collapse of the USSR, eastern European countries have been suffering increasing rates of community syndrome (Goodmann et al., 2021). One third of hospitalized patients reported depressive symptoms, with one fifth of those having symptoms within the last 30 days (Goodmann et al., 2021).

These high rates of depression are thought to be influenced by two models: the job strain model and the effort-reward imbalance model (Goodmann et al., 2021). The job strain model highlights how social support and job control can affect job demand, which "represents psychological stressors that arise from physical, psychological, social, or organizational aspects of the job" (Sykes, 2020, p. 2055). The effort-reward imbalance model emphasizes the effects of efforts versus rewards in employment (Ren et al., 2019). Young men in Eastern Europe have been particularly affected by high job efforts and low rewards, leading to an increased risk of depression and suicide (Goodmann et al., 2021).

While understanding cultural differences in the presentation of depression is important for providers, it is also important to understand cultural similarities. Knowledge of shared symptoms can help guide practitioners where generalized inquiries can be made during assessments (Goodmann et al., 2021). According to Goodmann et al. (2021) symptoms shared across cultures include physical symptoms like anhedonia, sleep issues, and irritability. They also note that across cultures most people believe suicidal ideation is a separate symptom from the act of attempting suicide.

Being cognizant of the differences in the manifestations of depression based on a patient's culture can be invaluable in the screening for depression. Patients with a Latin American background have shown that having low self-esteem has a high correlation with suicidality (Goodmann et al., 2021). They found sinfulness and guilt also correlate with higher levels of suicidality if a patient comes from a Catholic background where suicide is considered a sin. Goodmann et al. (2021) also noted that when thoughts of self-harm begin, a patient may start to feel guilty, like they are sinning, thus increasing the thoughts of self-harm. Therefore, individuals from a Latin American background should be screened for guilt, sinfulness, and worthlessness, and positive findings which indicate a higher risk of suicide should be explored (Goodmann et al., 2021).

Eastern European individuals show a uniqueness for disregarding affective symptoms in isolation but, in combination with cognitive and/or somatic symptoms, the individual will take symptoms of depression more seriously (Ji et al., 2021). Common to Russian culture is the belief that negative emotions are controllable by the individual (Goodmann et al., 2021; Ji et al., 2021). Additionally, expressing these emotions is acceptable and can be done openly without shame (Goodmann et al., 2021). Therefore, screening in this group should pay attention to

cognitive as well as somatic complaints, as these may present as more predictable indicators of depression (Goodmann et al., 2021).

Weight gain and weight loss hold high significance for Chinese individuals (Goodmann et al., 2021). Chinese medicine focuses on balance; when balance is achieved, physical and mental health are maintained (Da et al., 2021). Weight gain is associated with agitation and hypersomnia, while weight loss is associated with insomnia and appetite changes (Goodmann et al., 2021). Patients may view these as imbalances of energy instead of mental health illness, so the practitioner may want to approach depression screening with a knowledge of energy balance and proper health (Goodmann et al., 2021).

Western cultures place a high value on hard work. Therefore, a common theme amongst this group was cognitive symptoms being separated out by the individual (Goodmann et al., 2021). Mental fatigue may be considered by the individual as a side effect of hard work instead of depression (Goodmann et al., 2021). When screening for depression, the practitioner should evaluate a patient's work practices before and after the mental fatigue or other cognitive symptoms started. Analyzing patterns may help to identify causative factors of depression and assist the patient in recognizing and accepting the diagnosis (Goodmann et al., 2021). Failure to take cultural considerations into account when screening patients for depression increases the risk of misdiagnosis and leads to poorer outcomes (Goodmann et al., 2021).

Barriers to Diagnosis

It is estimated that over half of all patients with depression go undiagnosed by their primary care provider (Akincigil & Matthews, 2017). Some estimates show that up to 45% of patients presented to their primary care provider within one month of committing suicide

(Akincigil & Matthews, 2017). In addition to a general failure to screen for depression, certain groups are particularly missed by providers (Akincigil & Matthews, 2017). Men, older adults, and African Americans have the lowest screening, diagnosis, and treatment rates compared to other groups (Akincigil & Matthews, 2017).

There are many barriers within the healthcare setting that affect whether patients are diagnosed with depression. Patients report a variety of issues, beginning with the lack of providers willing to take on new patients (Colorafi et al., 2017). Once providers are located, patients report medical offices that are far away and hours that are not conducive to the patient's schedule, limiting their ability to seek care (Colorafi et al., 2017). Financial burden can also prevent patients from seeking care due to high medical co-pays and high prescription drug costs, as well as lack of insurance coverage (Colorafi et al., 2017).

Diagnosing Depression

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V-TR), a diagnosis of major depressive disorder is made when a patient meets the diagnostic criteria (American Psychiatric Association, 2022). A key criterion is that a patient must experience a two-week period in which five symptoms are present (more days than not) and one of the symptoms must be either loss of interest/pleasure (anhedonia) or depressed mood (American Psychiatric Association, 2022). A diagnosis of depression cannot be made if the symptoms are attributable to a known or newly diagnosed medical condition (American Psychiatric Association, 2022). Depression or its symptoms cannot be caused by a substance the patient has been exposed to or is ingesting (American Psychiatric Association, 2022). Finally, the symptoms must cause the patient significant distress or impairment in areas of functioning, including occupational or social interactions (American Psychiatric Association, 2022).

Depressed mood is defined in the DSM-V-TR as a subjective experience that can be described by the patient as feeling empty, hopeless, or sad (American Psychiatric Association, 2022). Patients may also meet the criteria for depression if their observed mood by others appears to match depression, such as flat affect or tearful (American Psychiatric Association, 2022). The depressed mood must be reported by the patient to be occurring most of the day, nearly every day, during the two-week period (American Psychiatric Association, 2022).

Anhedonia is when a patient experiences almost a complete lack of pleasure, motivation, enjoyment, and interest (Cooper et al., 2019). This diminished experience affects almost all aspects of life and causes the patient distress (American Psychiatric Association, 2022). Anhedonia meets the criteria for depression if it is occurring most of the day, nearly every day, during the two-week period (American Psychiatric Association, 2022). Direct observation or subjective account of anhedonia by the patient can be used for the diagnosis of depression (American Psychiatric Association, 2022).

There are seven other symptoms that are included in depression criteria that may be present. Weight changes are very common for depressed individuals (Sahle et al., 2019). DSM-V-TR criteria describe weight change as change in weight of more than 5% in one month, either weight gain or weight loss (American Psychiatric Association, 2022). If weight loss is noted, it should not be a loss due to current dieting with a goal of weight loss (American Psychiatric Association, 2022). Changes in appetite, increased or decreased, that are noted nearly every day also meet the criteria for depression (American Psychiatric Association, 2022).

Weight loss in depression is often an early symptom that is later replaced with weight gain (Privitera et al., 2013). Thought to be a survival instinct, human bodies under stress will experience decreased appetite, which is a protective mechanism against foodborne illnesses

(Privitera et al., 2013). A behavioral shutdown instinct, due to stress, may also explain early weight loss by patients because depression is extremely stressful on the human body (Privitera et al., 2013). However, research into depression has started to note that increases in body weight are far more common, due to increased access to food and the biological responses food have in the body (Privitera et al., 2013).

Obesity and depression are increasingly being identified as comorbid conditions (Sahle et al., 2019). Major depressive disorder triggers neurobiological changes that contribute to changes in the neural reward pathways (Privitera et al., 2013). Patients often engage in excessive eating during depressive episodes, either due to increased appetite or as a means of comforting themselves (Privitera et al., 2013). Foods often ingested first by patients are high in carbohydrates, which stimulates a dopamine response in the brain, increasing pleasure for the patient (Privitera et al., 2013). Whether consciously or unconsciously aware of this potential mood lift, patients may continue to engage in unhealthy eating habits (Privitera et al., 2013). When combined with decreased activity from the lack of energy associated with depression, this increases the chances of weight gain and obesity (Sahle et al., 2019).

Additional DSM-V-TR symptom criteria for diagnosing major depressive disorder include insomnia or hypersomnia nearly every day, fatigue or loss of energy nearly every day, and psychomotor agitation or retardation, which is a symptom that should have been observed by others (American Psychiatric Association, 2022). Other symptoms include indecisiveness or the inability to make decisions, and feelings of worthlessness or inappropriate guilt (American Psychiatric Association, 2022). Worthlessness and hopelessness can be ominous warning signs that a patient may start to experience suicidal thoughts or have suicidal intentions (American Psychiatric Association, 2022). Patients may have recurrent thoughts of death, suicidal ideation,

or suicide attempts (American Psychiatric Association, 2022). If present, passive or active suicide ideation requires a time-sensitive evaluation (American Psychiatric Association, 2022).

United States Preventive Services Task Force Depression Screening Recommendations

The United States Preventive Services Task Force (USPSTF) guidelines recommend screening for depression in the adult population (Siu, 2016). This recommendation includes all pregnant and postpartum women (Siu, 2016). With depression recognized as a serious cause of disability, screening patients in a variety of settings, including primary care settings, improves the likelihood of identifying patients with this disease (Siu, 2016).

Early identification of depression is key to positive outcomes for patients (Siu, 2016). The USPSTF has identified that screening combined with proper social support improves clinical outcomes for adult patients with depression (Siu, 2016). Once depression has been identified, treatment with either psychopharmacology, psychotherapy, or both has been shown to have the most beneficial outcomes for patients (Siu, 2016). The USPSTF has also determined that cognitive behavioral therapy is beneficial for pregnant and postpartum patients with depression (Siu, 2016). Harm associated with screening patients for depression was investigated as part of USPSTF due diligence in preparing its recommendations (Siu, 2016). It was determined that screening for depression causes little to no harm in adults (Siu, 2016). The use of cognitive behavioral therapy in pregnant and postpartum women also causes little to no harm (Siu, 2016).

Guidelines for depression screening were developed by the USPSTF to ensure that when screening is done, adequate systems are in place for a proper diagnosis (U.S. Preventive Services Task Force, 2016). It was concluded with moderate certainty that screening for depression has a sufficient net benefit for adults who receive care with adequate resources in place (U.S.

Preventive Services Task Force, 2016). The USPSTF determined with moderate certainty that screening for depression has a reasonable net benefit in pregnant and postpartum women if the practice had cognitive behavioral therapy or other therapy services available (U.S. Preventive Services Task Force, 2016).

The USPSTF does not currently have a recommendation for a specific screening measure, or the timing or interval for depression screening to be conducted (U.S. Preventive Services Task Force, 2016). The guidelines recognize that use of evidence-based screening measures can assist in an accurate diagnosis of depression and can make screening patients easier for providers (U.S. Preventive Services Task Force, 2016). Positive screenings should be followed up with comprehensive evaluations to determine proper diagnosis, identification of any comorbid conditions that exist, and development of an effective treatment plan (U.S. Preventive Services Task Force, 2016).

Presently, there is little evidence to support the ideal timing or interval. More evidence is needed across all populations to determine these recommendations (U.S. Preventive Services Task Force, 2016). Given the lack of information, the USPSTF recommends that adults who have not been previously screened for depression be screened expeditiously (U.S. Preventive Services Task Force, 2016). Additionally, clinical judgment should be used for ongoing screenings when the clinician identifies risk factors, comorbid conditions, or symptomatology that may indicate the possibility of depression (U.S. Preventive Services Task Force, 2016).

Evidence-Based Depression Screening Measures

Currently, there are numerous evidence-based depression screening measures available for use by healthcare professionals (American Psychological Association, 2019). The choice of a

depression screening measure involves many factors, including cost of the screening measure, availability of the measure in multiple languages, time needed to complete the screening measure, time needed to score the measure, and whether the measure is evidence-based (American Psychological Association, 2019). Commonly used screening measures include the Patient Health Questionnaire-2 (PHQ-2), the Patient Health Questionnaire-9 (PHQ-9), the Edinburgh Postnatal Depression Scale (EPDS), and the Geriatric Depression Scale (GDS) (American Psychological Association, 2019).

Using well-researched and thoroughly vetted evidence-based screening measures can assist clinicians in accurately diagnosing depression in patients (American Psychological Association, 2019). Evidence-based screening measures can also be used to evaluate the effectiveness of treatment plans (American Psychological Association, 2019). There are many screening measures that focus on symptoms of depression in specific patient populations, which might not be universally present in all people, and can assist in diagnosis (American Psychological Association, 2019). Familiarity with screening measures is important to factor in when choosing the proper depression screening measure to utilize in one's practice or with one's patients (American Psychological Association, 2019).

The Beck Depression Inventory (BDI) is used to measure the severity of depression and its associated behavioral manifestations (American Psychological Association, 2019). This screening measure has been validated for use in ages 13 to 80 years (American Psychological Association, 2019). The screening consists of 21 questions with multiple-choice responses and takes approximately ten minutes to complete (American Psychological Association, 2019). The BDI can be given via paper or computer and has been shortened to a 13-question version (American Psychological Association, 2019). The BDI has been validated for use in multiple

populations across the world. However, it is a copyrighted screening measure and requires the user to pay a fee for use (American Psychological Association, 2020).

The Hamilton Depression Rating Scale (HAM-D) goes by many acronyms, including HDRS and HRSD (American Psychological Association, 2019). Created by Max Hamilton, this 21-question measure is scored only on the first 17 items (American Psychological Association, 2019; Hamilton, 1960). Questions are either scored on a 3-point or 5-point scale (American Psychological Association, 2019). This screening measure takes 15 to 20 minutes to complete and score. The HAM-D is available in the public domain for free use (American Psychological Association, 2019). The HAM-D has also been validated for use prior to, during, and after the treatment of depression (American Psychological Association, 2019).

Hopelessness is a serious symptom of depression that can be an indicator of suicide risk (American Psychiatric Association, 2013). The Beck Hopelessness Scale can be used to assess a person's negative expectations of the future (American Psychological Association, 2019). This measure is sensitive to changes in a person's depression over time and highly correlates a person's negative expectations with the seriousness of their suicidal intent (Beck et al., 1974). The Beck Hopelessness Scale takes five to ten minutes to complete and includes 20 true-or-false responses used for measurement (American Psychological Association, 2019). This screening measure is available for purchase (American Psychological Association, 2019).

The Patient Health Questionnaire (PHQ) is a screening measure developed in the 1990s at Columbia University (American Psychological Association, 2021). This measure was originally established in primary care and obstetrical settings (American Psychological Association, 2021). Since that time, studies have been conducted repeatedly amongst multiple populations and multiple settings, affirming its validity and reliability. A 2019 study in Tehran

showed the PHQ-9 and PHQ-2 were effective, easy-to-use screening measures for patients with infertility (Maroufizadeh et al., 2019). Rancans et al. validated its use in Latvia in 2018 for primary care patients.

The Patient Health Questionnaire includes the two-question PHQ-2 version and the nine-question PHQ-9 version, corresponding to the two gateway symptoms (i.e., depressed mood, anhedonia) and seven other symptoms associated with depression (American Psychological Association, 2022). This screening measure can be completed independently by a patient or administered by a screener (American Psychological Association, 2022). It is available in the public domain for free and has been translated into multiple languages (American Psychological Association, 2022). If a patient screens positive on the PHQ-2, then the expanded PHQ-9 can be utilized to confirm a diagnosis of depression and to determine the severity (American Psychological Association, 2022).

The Geriatric Depression Scale (GDS) is used to screen and measure depression in older adults without significant cognitive impairment (American Psychological Association, 2019; Brown et al., 2015). The full GDS screening measure consists of 30 yes-or-no questions, which is easier for older adults with cognitive impairment to use. However, shorter versions are also available (American Psychological Association, 2019). The questions are to be answered based on symptoms experiences over the past week (American Psychological Association, 2019). The GDS is available for free in the public domain and takes five to seven minutes to complete (American Psychological Association, 2019).

The Center for Epidemiologic Studies Depression Scale (CES-D) is a 20-question self-report of the major aspects of depression a patient may have experienced in the last week (American Psychological Association, 2019). Items are measured using a 4-point scale, including

depressed mood, feelings of guilt and worthlessness, psychomotor retardation, sleep disturbance, feelings of helplessness and hopelessness, and loss of appetite (Measurement Instrument Database for the Social Sciences, 2021). This screening measure has been validated in ages six to older adult and has proved to be valid and reliable across gender and cultural populations (American Psychological Association, 2019). The entire screening measure takes 20 minutes to administer and score and is available for free in the public domain (American Psychological Association, 2019). One disadvantage is that the CES-D is a validated measure for measuring severity but may not be the best measure for diagnosing depression in comparison to other available screening measures (Measurement Instrument Database for the Social Sciences, 2021).

Provider Barriers for Depression Screening

Depression screening by providers remains low, in many cases because providers are unsure how to screen patients properly (Owens-Gary et al., 2018). Identified barriers in the literature include a lack of provider knowledge and support (Swartz et al., 2016). Many providers consider psychosocial issues and illness to be beyond their scope of practice or expertise, which affects their decision to screen for depression (Owens-Gary et al., 2018). There is also a perception amongst providers that patients who screen positive may not follow through with referrals, thereby making the screening a fruitless exercise (Owens-Gary et al., 2018).

Providers often cite excessive workload as a barrier to screening for depression, and physical conditions being treated leave little time for additional screenings (Owens-Gary et al., 2018). Other barriers include a lack of understanding on how to administer screening measures, scoring procedures, interpretations, and a lack of referral sources (Owens-Gary et al., 2018). Many providers will cite a lack of reimbursement for screening as a factor (Owens-Gary et al., 2018). This issue illustrates the lack of provider knowledge in the field, as many insurance

providers now offer reimbursement for depression screening, including the Medicare and Medicaid insurances (Centers for Medicare & Medicaid Services, 2022).

Employees and providers should be interviewed to understand their perceptions and knowledge of using screening measures (Henry et al., 2019). It is essential to understand how providers would like to integrate screening measures into their practice and not assume that identified barriers in the literature match provider barriers at a site (Henry et al., 2019). Educational training of staff and follow-up surveys can be completed to determine if the use of screening measures is feasible (Henry et al., 2019).

Outpatient Mental Health Services in the United States

In 2020, there were 14,187 mental health service facilities in the United States according to the National Mental Health Services Survey (N-MHSS-2020) (Center for Behavioral Health Statistics and Quality, 2021). Outpatient mental health facilities are defined as facilities that "provide only outpatient mental health services to ambulatory clients, typically for less than three hours at a single visit" (Center for Behavioral Health Statistics and Quality, 2021, p. 6). Outpatient facilities are typically overseen by a psychiatrist, who assumes medical responsibility for all clients and oversees their mental health plan of care (Center for Behavioral Health Statistics and Quality, 2021).

The N-MHSS-2020 survey showed that 78% of all facility settings were outpatient and 21% of mental health facilities were operated by private for-profit organizations (Center for Behavioral Health Statistics and Quality, 2021). The median number of clients served in outpatient facilities was 158 monthly (Center for Behavioral Health Statistics and Quality, 2021). Half of all the outpatient mental health facilities treated both substance-use disorder as well as

mental health illnesses (Center for Behavioral Health Statistics and Quality, 2021). Outpatient mental health facilities reported 91% of clinics accepted Medicaid, 67% accepted Medicare, 80% accepted private health insurance, and 86% accepted cash or self-payment (Center for Behavioral Health Statistics and Quality, 2021).

A variety of services are provided by outpatient mental health facilities, according to the survey (Center for Behavioral Health Statistics and Quality, 2021). Psychotherapeutic modalities offered by outpatient facilities included a variety of formats, such as individual, couples, and group psychotherapy (Center for Behavioral Health Statistics and Quality, 2021). Facilities surveyed provided a variety of therapeutic techniques, including cognitive behavioral therapy (CBT), cognitive remediation therapy, dialectical behavioral therapy (DBT), behavior modification therapy, trauma therapy, activity therapy, and eye movement desensitization and reprocessing therapy (EMDR) (Center for Behavioral Health Statistics and Quality, 2021). Other services offered at some facilities included electroconvulsive therapy (ECT), transcranial magnetic stimulation (TMS), and ketamine infusion (Center for Behavioral Health Statistics and Quality, 2021).

More outpatient facilities treated young adults (ages 18 to 25 years), adults (ages 26 to 64 years), and seniors (ages 65 years and older) rather than children (ages birth to 17) (Center for Behavioral Health Statistics and Quality, 2021). Of the outpatient providers in the South U.S. Region, 31% accepted clients of all ages (Center for Behavioral Health Statistics and Quality, 2021). In the South U.S. Region, information regarding the race of clients showed 30% were unknown, 43% were Caucasian, 22% were Black or African American, 2% were of two or more races, 2% were Asian, 1% were American Indian or Alaska Native, and less than 1% were Native Hawaiian or Other Pacific Islander (Center for Behavioral Health Statistics and Quality,

2021). Ethnic breakdowns were similar, with 34% unknown or data not collected (Center for Behavioral Health Statistics and Quality, 2021). A total of 8% of clients in the survey reported as Hispanic or Latino, and 57% did not identify as Hispanic or Latino (Center for Behavioral Health Statistics and Quality, 2021).

Florida ranks 43rd in the United States for access to mental health services, with 61.4% of adults with any mental illness failing to receive any mental healthcare (Florida Behavioral Health Association, 2019). Less than 40% of mental health facilities were outpatient, with Florida being one of four states with more than 30 private psychiatric hospitals (Center for Behavioral Health Statistics and Quality, 2021). Outpatient mental health facilities in Florida failed to provide a variety of services, including chronic disease management, illness management, integrated primary care services, diet and exercise counseling, vocational rehabilitation, supported employment, peer support services, screening for tobacco use, smoking/vaping/tobacco cessation counseling, and nicotine replacement therapy (Center for Behavioral Health Statistics and Quality, 2021). This decrease in outpatient services has led to an increase in suicides, with 90% of Florida counties in 2017 experiencing more suicides than homicides (Florida Behavioral Health Association, 2019).

Screening for depression has been shown to be feasible and effective in a variety of settings. Early recognition and treatment of depression can improve the quality of life and outcomes for patients. Yet barriers exist that prevent clinicians from screening. Investigating how to implement evidence-based depression screening measures at healthcare sites is needed to address barriers and to problem solve with stakeholders.

Purpose

To explore clinician perspectives on implementing evidence-based depression screening measures for all new patients over the age of 18 in a psychiatric clinic.

Theoretical Framework Guiding the DNP Project

Using evidence-based depression screening measures has been shown to improve patient outcomes. To implement use in a private psychiatric practice, a change in behavior and procedures is often required. The Ottawa Model of Research Use was utilized to guide this DNP project (Hogan & Logan, 2004). The model involves a six-step approach, with the first three steps being relevant to this quality improvement project (Hogan & Logan, 2004). The first step is to identify the people who are authorized to make changes in an organization, what resources are available to enact change in the organization, and who would be possible change agents (Hogan & Logan, 2004). The second step is to articulate the expected change and what steps may be needed to implement that change (Hogan & Logan, 2004). For this DNP project, this was done by working with the clinic's chief administrative officer.

Step three involves a comprehensive situational assessment (Hogan & Logan, 2004). This includes examining three areas: evidence-based recommendations, potential adopters, and practice environment (Hogan & Logan, 2004). Evidence-based recommendation assessment includes identifying the reasons why a change is needed (Hogan & Logan, 2004). Second, it is important to understand and evaluate the knowledge, attitudes, and skills of the potential adopters of the change in behavior (Hogan & Logan, 2004). Finally, the practice environment includes understanding the patients involved, the structure and workflow of the organization, and the social and economic impacts of the change (Hogan & Logan, 2004). For this DNP project, this was done by interviewing staff to determine their perspective, the current intake process, and workflow.

Methodology

This DNP project included a cross-sectional survey conducted with convenience sampling. The clinicians at the private psychiatric office who were eligible to complete the survey included: intake coordinators, psychiatrists, advanced practice registered nurses, clinical psychologists, licensed mental health counselors, and licensed clinical social workers. In total, there were 15 eligible participants.

Protection of Human Subjects

The research protocol was submitted and approved by the FIU IRB (see Appendix A). Potential participants were informed about the project, its purpose, the method, the risks, and the benefits to society. An informational flyer was provided, explaining the DNP project to potential participants (see Appendix B). No identifiable patient or participant information was collected.

Setting

The site for the project was a private psychiatric clinic servicing clients across the lifespan. The project site serves primarily a Medicaid and Medicare population, with these clients making up greater than 70% of the total clients served. The site offers services in a variety of settings, including in-person, in-home, in assisted living or nursing home facilities, and telehealth. Clients can receive psychotherapeutic and psychopharmacologic management.

The existing model of assessment and diagnosis included an intake process with a social worker followed by a comprehensive psychiatric evaluation conducted by either a psychiatrist or advanced practice registered nurse for all new adult clients. The clinic does not currently use evidence-based depression screening measures. Rather, assessment and diagnosis of depression

is made through client interview, client assessment, and utilization of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V-TR) (American Psychiatric Association, 2022).

The clinic services on average 200 clients per month. Approximately 61% of these clients are adults 18 years or older and the other 39% are children up to age 17. A wide range of ethnic backgrounds are served at this clinic, however 57% of clients' ethnic backgrounds are unknown (i.e., patient prefers not to self-identify). The breakdown of known race and ethnicities served includes 20% Black or African American, 15% Caucasian, 6% Hispanic or Latino, and less than 1% Native American or Alaska Native. The clinic does not allow clients to report more than one ethnicity. Additionally, no clients self-identified as Asian or Native Hawaiian or Other Pacific Islander. Approximately 69% of the clients are female.

Survey

The survey explored the clinicians' perspective on implementing an evidence-based depression screening measures during the intake of adult clients. The survey items included demographics and exploration of participant knowledge, experience, and willingness to use evidence-based depression screening measures. Guided by previous research (Brown et al., 2004), survey items were developed using the Transtheoretical Model (TTM) developed by James Prochaska and Carlo DiClemente (1983).

The TTM stages are the steps taken to produce and maintain change (Polit & Beck, 2017). A key element to this is the idea that change takes place over time (Prochaska & Velicer, 1997). Change is often identified as a behavior change event, but the process involves steps both before and after the identified change is made (Prochaska & Velicer, 1997). The TTM includes

six stages of change: precontemplation, contemplation, preparation, action, maintenance, and termination (Prochaska & Velicer, 1997).

The survey examined participant perspectives on whether they contemplated or were prepared to initiate evidence-based depression screening measures. Survey questions captured the essence of the precontemplation, contemplation, and preparation stages of the TTM. The work done by Brown et al. (2004) investigated depression screening being conducted by home healthcare nurses. Depression screening had not been previously conducted by home healthcare nurses, so to determine their readiness for change, the TTM was used as a framework with a particular focus on the precontemplation, contemplation, and preparation stages (Brown et al., 2004).

The precontemplation stage is where a person may be aware of the idea of change but is not going to take any short-term action, which is measured as being within the next six months (Prochaska & Velicer, 1997). During this stage, a person is usually underinformed or uninformed about the change and avoids acquiring any information to assist with change (Prochaska & Velicer, 1997). They are usually resistant and unmotivated and therefore will not engage in any activities that pursue the potential change (Prochaska & Velicer, 1997).

The next stage is contemplation, in which a person intends to make change within the next six months (Prochaska & Velicer, 1997). A struggle emerges, as the person can identify some positive aspects of the change but focuses more on the negative effects change may cause them (Prochaska & Velicer, 1997). Costs and benefits are regularly reviewed, creating ambivalence, which may remain for some time (Prochaska & Velicer, 1997). Preparation follows contemplation, in which a person is determined to make change within the next month (Prochaska & Velicer, 1997). Usually, a person at this stage has completed certain activities

designed to help them be successful with their change, such as taking classes or reading educational material (Prochaska & Velicer, 1997).

An example of an evidence-based depression screening measure was included in the survey. The Patient Health Questionnaire-9 (PHQ-9) and the corresponding treatment action table were included for the participants to review (see Appendix D). This allowed clinicians to review a potential screening measure and provide their feedback on its use. The PHQ-9 has been widely used across the world amongst many cultures and populations. This screening measure can be administered and reviewed quickly and is easy to learn to use. Therefore, the PHQ-9 seemed like a good choice for inclusion.

Data Management and Analysis Plan

Survey data were stored and analyzed using an Excel spreadsheet. Data were kept secure through password protection. No identifiable participant information was sought or kept. Data collected from the surveys were used to conduct descriptive statistics. Descriptive statistics "describe and synthesize data" (Polit & Beck, 2017, p. 356).

Results

Eight participants of the eligible 15 responded to the survey. This resulted in a participation rate of 53.3%. Of the eight participants, two identified as advanced practice registered nurses, one was a licensed mental health counselor, and one was a licensed clinical social worker. The other four participants chose not to include their licensure or position. The average years licensed by the participants was 1.75 years, with five participants having less than one year of experience.

Mental Health Significance and Screening

Seven of the eight participants rated depression significance as a "5," indicating depression was a "very significant" issue with new adult clients. One participant rated it a "4" on a scale of zero to five, where zero is "Not Significant" and five is "Very Significant". Participants on average reported 80% of new adult clients were depressed on intake into the clinic. The eight participant "depression prevalence" responses were 17.5%, 60%, 65%, 80%, 80%, 90%, 90%, and 100%.

Use of Evidence-Based Screening Measures

Participants were asked if they had ever considered using an evidence-based depression screening measure as part of the intake process for new adult clients. Six of the eight participants, representing 75% of total responses, indicated they had considered using screening measures. One participant noted, "We do use a mental health screening tool, but it is a great consideration." The clinic currently uses an internally developed depression questionnaire. Fifty percent of participants reported they had administered an evidence-based depression screening measure as part of the adult intake process.

Participants were asked to identify evidence-based depression screening measures they had used or were currently using in their practice. The Patient Health Questionnaire-2 (PHQ-2) and the Beck Depression Inventory (BDI) were the most identified screening measures used, with 37.5% (n =3) of respondents respectively using them currently or in the past. Two participants, representing 15% of the total responses, identified the Geriatric Depression Scale (GDS) as a depression screening measure they had utilized. The Hamilton Depression Rating

Scale (HAM-D) and the Patient Health Questionnaire-9 (PHQ-9) were the least identified depression screening measures, with only one participant identifying their past or current use. Two participants (25%) chose not to answer this question.

Participants were provided with the Patient Health Questionnaire-9 (PHQ-9) for review and then asked if they felt it would be feasible to include this evidence-based depression screening measure during the adult intake process. Seven out of eight participants, or 88%, felt that including the PHQ-9 was feasible. Participants were asked if they would benefit from receiving training on administering the PHQ-9. All eight participants, representing 100% of responses, responded that they would benefit from receiving training on administering the PHQ-9. Participants were asked if they would feel comfortable explaining and administering the PHQ-9 after receiving training. All eight participants responded that they would feel comfortable explaining and administering the PHQ-9 after receiving such training.

Participants were also presented with a proposed treatment action table for the Patient Health Questionnaire-9 (PHQ-9) depression screening measure. Participants were asked to review the scoring system and asked if they were to receive training on scoring the PHQ-9, would they feel comfortable using the table independently? All eight participants, representing 100% of responses, responded they would feel comfortable scoring the PHQ-9 after receiving such training.

Barriers to Screening

Participants were asked to identify barriers to using an evidence-based depression screening measure during the intake of new adult clients. Three participants identified only one

perceived barrier to using screening measures. One participant cited lack of time, while another participant cited discomfort with administering the screening measure. The third participant cited being unsure of how to score the screening measure as a barrier. A lack of training on how to use an evidence-based depression screening measure, as well as access to the screening measures, were both identified as barriers by 38% of participants. A lack of cooperation by adult clients was cited as a barrier by 25% of participants. One participant chose not to answer the survey question.

Finally, participants were asked to identify which resources were needed to ensure that implementing the evidence-based depression screening measures was successful. All participants identified at least one resource needed. Training on using screening measures and training on scoring screening measures were both identified by 88% of participants as a needed resource. Screening measures in multiple languages, as well as client education resources, were the next highest needed resources and were identified by 75% of participants. The need for community resources was cited by 50% of participants, followed by 38% of participants stating that they needed more time with clients as well as additional staff. Finally, 25% of participants felt additional technology may be needed to use evidence-based depression screening measures.

Discussion

The primary finding from this DNP project was that the clinic staff believed it was feasible to utilize an evidence-based depression screening measure during the intake of an adult client. Most of the participants had "contemplated" the use of a depression screening measure but indicated implementation would require training. Participants identified that to be prepared (i.e., "preparation" stage), they would need training on administering and scoring screening

measures. They also responded they needed screening measures in multiple languages, access to community resources for client referral, and more time and staff to successfully implement a change to current practice.

Most of the participants viewed depression as a "very significant" problem amongst new adult clients, which is consistent with the literature (Jia et al., 2021). Participants reported a perceived prevalence rate for depression of 80% amongst new adult clients. While this prevalence rate is higher than the literature reports, the elevated rate may be attributed to the project setting, which was a psychiatric clinic.

The majority of participants reported they had considered using an evidence-based screening measure during the intake of an adult client. One participant observed, "We use a mental health screening tool, but it is a great consideration." The clinic currently uses an internally developed depression questionnaire. However, 50% of participants had never administered an evidence-based depression screening measure. Participants were asked to identify evidence-based depression screening measures they were familiar with. Most of the participants were unfamiliar with the presented screening measure options.

Participants were provided with the Patient Health Questionnaire-9 (PHQ-9) and a treatment action table as part of the survey. Participants responded that it was feasible to include the PHQ-9 during the intake of an adult client. The implication of this response is that practitioners are receptive to including an evidence-based screening measure during an intake if it is available. Participants reported they would be comfortable administering and scoring the PHQ-9 after receiving training. The implication of this response is that evidence-based depression screening measures are feasible for use if appropriate training is provided.

Participants were asked to identify barriers for implementing evidence-based depression screening measures during the intake of an adult client. Identified barriers included a lack of time with clients, a lack of access to a screening measure, a lack of cooperation by clients to complete a screening measure, discomfort with administering and scoring an evidence-based depression screening, and a need for more staff. Additionally, participants wanted access to screening measures in multiple languages, as well as access to community resources for their clients. These findings indicate the participants find value in the use of evidence-based depression screening measures but organizational support to make this change in practice is needed, including training on administering the screening measure.

Limitations

Several limitations need to be considered when interpreting these project findings. First, only slightly more than half of the eligible clinicians participated. Those who did not participate may have a different perspective from the responses received. Second, most participants had limited clinical experience and were unfamiliar with the commonly listed evidence-based depression screening measures. It is unknown if more experienced clinicians would share similar views. Finally, the project took place in one outpatient psychiatric clinic setting. It is unknown if these findings would be generalizable to other psychiatric clinics.

Implications for Advanced Practice Registered Nurses (APRN)

Advanced practice registered nurses (APRN) across healthcare settings are often optimally positioned to conduct depression screening with clients. Therefore, up-to-date knowledge about depression, depression screening measures, and care management across the

lifespan is essential. These survey results indicate that implementing an evidence-based depression screening procedure is feasible with the proper training and organizational support for the APRN. The project results demonstrate that implementing a depression screening protocol will be well received by clinicians and is a feasible role for the APRN. Depression screening protocols should include appropriate measures for the population, patient and family education, support services, and an up-to-date list of healthcare providers to evaluate the client with positive depression screening results.

Conclusion

Implementing new processes can be challenging. These findings indicate that clinicians do not currently utilize evidence-based depression screening measures but are very receptive to using them in their current practice if given proper support, training and resources. The next step at this clinic is to finalize, with stakeholders, a detailed plan for implementing an evidence-based depression screening protocol.

Appendices

Appendix A: IRB Approval Letter

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Office of Research Integrity
Research Compliance, MARC 414

MEMORANDUM

To:	Dr. Ellen Brown
CC:	Samantha Montealegre
From:	Elizabeth Juhasz, Ph.D., IRB Coordinator EJ
Date:	April 13, 2022
Protocol Title:	**"Use of a Depression Screening Measure: Perspective of Clinicians in a Mental Health Clinic"**

The Florida International University Office of Research Integrity has reviewed your research study for the use of human subjects and deemed it Exempt via the **Exempt Review** process.

IRB Protocol Exemption #:	IRB-22-0155	**IRB Exemption Date:**	04/13/22
TOPAZ Reference #:	111392		

As a requirement of IRB Exemption you are required to:

1) Submit an IRB Exempt Amendment Form for all proposed additions or changes in the procedures involving human subjects. All additions and changes must be reviewed and approved prior to implementation.
2) Promptly submit an IRB Exempt Event Report Form for every serious or unusual or unanticipated adverse event, problems with the rights or welfare of the human subjects, and/or deviations from the approved protocol.
3) Submit an IRB Exempt Project Completion Report Form when the study is finished or discontinued.

Special Conditions: N/A

For further information, you may visit the IRB website at http://research.fiu.edu/irb.

EJ

Appendix B: Project Flyer

MENTAL ILLNESS IS ONE OF THE LEADING CAUSES OF DISABILITY IN THE UNITED STATES

LOCATION

Complete a survey from your office.

TIME

Paper survey will take less than 10 minutes to complete

If you need more information, please contact Samantha Montealegre at 954-547-7356.

Thank you!

WE ARE INVITING CLINICIANS TO EXPLORE THEIR PERCEPTIONS ON THE FEASIBILITY OF USING DEPRESSION SCREENING MEASURES DURING THE INTAKE OF NEW ADULT CLIENTS BY COMPLETING A SURVEY.

EXPECTATIONS: THIS PROJECT WILL BENEFIT SOCIETY BY IMPROVING HEALTHCARE PROVIDER KNOWLEDGE OF CLINICIAN PERSPECTIVES ON THE USE OF EVIDENCED-BASED DEPRESSION SCREENING MEASURES DURING THE INTAKE PROCESS OF ADULT CLIENTS.

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Appendix C: Informational Letter

INFORMATIONAL LETTER

Use of a Depression Screening Measure: Perspective of Clinicians in a Mental Health Clinic

Hello, my name is Samantha Montealegre, a DNP student at Florida International University. I am the Protocol Associate working with Dr. Ellen Brown, the Principal Investigator for this project.

You have been chosen to take part in a research project about the use of depression screening measures as you are an employee at Assurance of Hope Institute. The purpose of this project is to understand a clinician's perspective regarding the use of evidence-based depression screening measures. If you decide to participate in this project, you will be one of fifteen people in this research project. Participation in this project will take approximately 10 minutes of your time. If you agree to participate in the project, I will ask you to do the following:

- Complete the paper survey provided, answering the questions contained in the survey. If you are uncomfortable with any survey questions, you will be able to select: Prefer not to answer.

There are no foreseeable risks to you for participating in this project. The benefit to you is providing your perspective on the use of evidence-based screening measures for depression. It is expected that this project will benefit society by helping healthcare providers understand the feasibility of using evidence-based depression screening measures during the intake process of adult clients at Assurance of Hope Institute. There is no cost or payment to you.

The project will be a paper survey that you will place into a sealed container after you have completed it. Once all surveys have been completed by the participants, the surveys will be picked up, the data will be entered in an excel spreadsheet and it will be stored on a password protected laptop. Surveys will be destroyed after data analysis is completed. No identifiable information will be requested, and you will remain anonymous.

If you have questions for one of the researchers conducting this project, you may contact Samantha Montealegre at 954-547-7356 / smont094@fiu.edu or Dr. Ellen Brown at ebrown@fiu.edu.

If you would like to talk with someone about your rights as a participant in this research project or about ethical issues with this research project, you may contact the FIU Office of Research Integrity by phone at 305-348-2494 or by email at ori@fiu.edu.

Your participation in this research is voluntary. You will not be penalized if you refuse to participate or decide to stop. You may keep a copy of this form for your records

Appendix D: Survey Questions

Please complete the following questions by checking your responses. We are interested in your response to all questions even if you are unsure of your answer. You may choose to skip any question by checking "Prefer not to answer". Thank you!

1. What is your gender?

   ☐ Male

   ☐ Female

   ☐ Prefer not to answer

   ☐ Other_____

2. What professional license(s) do you hold, if any (select all that apply)?

   ☐ Medical Doctor (MD)

   ☐ Advanced Practice Registered Nurse (APRN)

   ☐ Licensed Clinical Social Worker (LCSW)

   ☐ Licensed Mental Health Counselor (LMHC)

   ☐ Registered Nurse (RN)

   ☐ Prefer not to answer

   ☐ Other_____

3. How many years have you been a licensed mental health professional?

   _____

4. How significant a problem do you think **depression** is with new adult clients? Please select a number between 0 and 5 indicating the significance.

   Not Significant **Very Significant**

   0 1 2 3 4 5

5. What percentage of adult clients when they first enter the practice do you think are depressed? Please provide your best estimate.

   %_____

6. Have you ever considered using an evidence-based depression screening measure as part of the intake process for new adult clients?

   Yes No

   If no, why not? (Please write your answer in the space provided below.)

   _____

   _____

   _____

7. Have you ever administered an evidence-based depression screening measure as part of the intake process for new adult clients?

   Yes No

   If no, why not? (Please write your answer in the space provided below.)

   _____

   _____

   _____

8. The following are a list of commonly used evidence-based depression screening measures for an adult and older adult population. Please select all evidence-based depression screening measures that you have used in your current or past clinical practice. (Please select all that apply.)

☐ Patient Health Questionnaire 2 (PHQ-2)

☐ Patient Health Questionnaire 9 (PHQ-9)

☐ Beck Depression Inventory (BDI)

☐ Hamilton Depression Rating Scale (HAM-D)

☐ Geriatric Depression Scale (GDS)

☐ Prefer not to answer

☐ None

☐ Other_____

9. What barriers do you think might be encountered when implementing the use of evidence-based depression screening measures during the intake of new adult clients? (Please select all that apply.)

☐ Lack of time

☐ Lack of cooperation by adult clients

☐ Lack of training

☐ Discomfort with administering screening measures

☐ Lack of access to the measure

☐ Unsure how to score the measure

☐ Prefer not to answer

☐ Other_____

10. The Patient Health Questionnaire 9 (PHQ-9), below, is a commonly used depression screening measure.

Over the last 2 weeks, how often have you been bothered by any of the following problems?	**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 fidgety 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 in some way	0	1	2	3

Do you believe it is feasible to include the Patient Health Questionnaire 9 (PHQ-9) during the intake process for a new adult client?

Yes No

If no, why not? (Please write your answer in the space provided below.)

_____

_____

_____

11. Do you feel you would benefit by receiving training on the administration of the Patient Health Questionnaire 9 (PHQ-9) to new adult clients?

    Yes No

    If no, why not? (Please write your answer in the space provided below.)

    _____

    _____

    _____

12. If you were given training on the administration of the Patient Health Questionnaire 9 (PHQ-9) to new adult clients, would you feel comfortable explaining the purpose of the screening measure and conducting the screening with a new adult client?

    Yes No

    If no, why not? (Please write your answer in the space provided below)

    _____

    _____

    _____

13. **Please consider the scoring system for the Patient Health Questionnaire 9 (PHQ-9), below, when answering the next question.**

Proposed Treatment Action by PHQ 9 Score

PHQ-9 Score	Depression Severity	Proposed Treatment Actions
0-4	Non – Minimal	None
5-9	Mild	Watchful waiting; repeat PHQ 9 at follow-up
10-14	Moderate	Review treatment plan if not improving in past 4 weeks; Consider discussion of additional support such as pharmacotherapy
15-19	Moderately Severe	Consider adjusting treatment plan and/or frequency of sessions; Discuss additional supports such as pharmacotherapy; For SonderMind Anytime Messaging clients, consider converting from asynchronous to synchronous therapy channels
20-27	Severe	Adjust treatment plan; focused assessment of safety plan and pharmacotherapy evaluation/ re-evaluation; If emergent then refer to higher level of care; Likely Not a candidate for asynchronous/text therapy

14. If you were given training on the scoring of the Patient Health Questionnaire 9 (PHQ-9) screening measure, would you feel comfortable scoring it once completed by the new adult client?

Yes No

If no, why not? (Please write your answer in the space provided below.)

_____

_____

_____

15. In contemplating the use of an evidence-based depression screening measure during the intake of a new adult client, which of the following do you think might need to be implemented to use evidence-based depression screening measures? (Please select all the apply.)

☐ Additional training on using the screening measure

☐ Additional training on scoring the screening measure

☐ Screening measure printed in multiple languages

☐ Additional staff to assist in completing the screening measure

☐ Client education resources about the screening measure

☐ Additional time with the client

☐ Additional community resources for clients

☐ Additional technology to assist in screening clients

☐ No changes are needed

☐ Prefer not to answer

☐ Other_____

Thank you!

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