

**Examining Depression Pathways in Primary Care and
Its Effectiveness on Latino Men**

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Date of Dissertation Defense: July 14, 2021

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Abstract

This study reviewed data from primary care clinics in the state of Washington in which the primary care behavioral health model was practiced to examine depression pathways used to improve depression care among Latino men and to highlight differences between Latino men and non-Latino White men. Further, treatment interventions for depression were reviewed to assess psychotherapy, medication and combined treatments to verify their effectiveness by tracking changes in the Patient Health Questionnaire-9 over time. The hypotheses posit (a) Latino males in clinic would engage with behavioral health less than their non-Latino counterparts, (b) Latino men would have lower rates of medication adherence compared to non-Latino White males, (c) Latino men engaged in the depression pathway would endorse symptom reduction at a faster rate than non-Latino White males, and (d) Latino men would have more visits to behavioral health compared to the nation average for men. There were no significant findings between groups in the number of visits and symptom reduction practices. There was a significant difference found when Latino males in this group were compared to the national average number of visits for Latinos. There was also a significant difference found suggesting the studied depression clinical pathway was effective for males represented in this study.

Keywords: Latinos, men, depression, primary care, depression pathways

Acknowledgments

I am thankful to God for opening the doors to this endeavor, it is truly a blessing. I never would have imagined He had such plans for me. Familia, no encuentro palabras para poder expresarles cuán agradecida me siento por todo lo que han hecho y siguen haciendo por mí. Mil gracias por estar siempre a mi lado y ser mi apoyo cuando más les he necesitado, los amo. A mi madre le agradezco por motivarme a seguir estudiando con el proposito de ayudar a otros. Mono, por mucho que lo intente, no encuentro manera de agradecerte tu esfuerzo y tu ayuda tal y como mereces. Por eso, te digo simplemente, gracias. Quiero que sepas que siempre podrás contar conmigo. To my Coheart 8, I consider each of you a blessing as you provided me with support, validation, comfort and a friendship that I know will last a lifetime. To my professors and CSBS community, I appreciated each of you stopping by my desk to offer your support and sharing your confidence in my ability to finish the program. To my dissertation committee members, I am thankful for your support and for the warmth you showed me that helped me feel confident through this process.

Pues todas las cosas provienen de él y existen por su poder y son para su gloria. ¡A él sea toda la gloria por siempre! Amén (Romanos 11:36 , NTV).

For everything comes from him and exists by his power and is intended for his glory. All glory to him forever! Amen. (Romans 11:36, NLT).

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Chapter 1

Statement of the Problem

Latinos must confront significant cultural barriers and stigma when they attempt to use mental health services (Hansen & Cabassa, 2012; Wells et al., 2013). These barriers and stigma must be overcome despite the existence of links regarding comorbid issues such as functional impairments, costs, and mortality. Treatment of depression is typically engaged for a majority of Latinos through a primary care clinic visit (Garcia et al., 2020; Vega et al., 2010). Therefore, integrative behavioral health care systems have played a crucial role in the successful obtainment of mental health care for Latinos (Garcia et al., 2020). The central goal of integrative care is to engage patients in their treatment, and to improve this, clinics have continued to implement pathways to increase the likelihood of treatment utilization, consequently improving the overall health of their clients (Reiter et al., 2018).

Clinical pathways are one method for primary care providers to succeed in meeting patients' needs, allowing an opportunity to introduce behavioral health care to patients during a routine primary care visit; this is also known as a warm handoff (Reiter et al., 2018). Based on Horevitz et al.'s (2015) research, warm handoffs are postulated to have a significant positive impact with Latinos as it aligns with "personalismo," which is an example of personal relationship values the Latino culture incorporates. More importantly, there is a reduction of stigmatization toward mental health through warm handoffs, especially within the Latino culture (Horevitz et al., 2015).

The importance of maximizing overall clinical care for every client is paramount in the behavioral health consultant role, as well as the primary care provider role. Various

pathways have been formulated to better emphasize necessary population considerations and ensuring everyone is able to receive effective care, reducing symptoms of concern and improving overall health (Reiter et al., 2018). However, there is limited information on the implementation and effectiveness of depression clinical pathways for Latino men in particular. In response to this need for robust and appropriate clinical pathways for Latino men, this study examined the efficacy of a depression pathway variation on treatment adherence, specifically for Latino men engaging in primary care. Additionally, the study analyzed the Latino men's treatment engagement, treatment outcomes, and how this may vary to non-Latino White males.

Literature Review

Prevalence and Effects of Depression

Depression has been an increasing cause of concern worldwide (World Health Organization, 2020) with more than 264 million people affected (Duan et al., 2020). In the United States, about 17.3 million American adults are affected by major depressive disorder and the economic consequence is estimated to exceed \$210 billion (Duan et al., 2020). Depression is characterized by feelings of emptiness, sadness, irritable mood, somatic complaints, decreased cognition, which consequently interferes with a person's ability to function in everyday life (Duan et al., 2020; Penninx et al., 2013). Individuals between 18 to 25 years of age had the highest prevalence of a major depressive episode. Among adults, about 35% with major depressive episode fail to receive proper treatment (National Institute of Mental Health [NIMH], 2019a).

Depression had been linked to detrimental physical, behavioral, and psychological health, which includes higher risk of negative coping such as substance use (Cao et al.,

2020), increased risk of smoking cigarettes (Weinberger et al., 2017), decreased levels of physical activity, and higher rates of obesity (Mannan et al., 2016). Lifetime prevalence of depression is estimated to be 16.2% in the United States, 11.3% in Canada, 3.4 % in China (Duan et al., 2020). Additionally, increased risk of cardiovascular illness has been found among individuals with depression (Cao et al., 2020; Caplan & Whittemore, 2013) as well as increased risk of Alzheimer's. Consequently, quality of life is compromised as depression is one of the main factors in disability and unhealthy lifestyles. Depressed individuals reported poorer adherence to generally recommended healthy habits and poorer self-care (Penninx et al., 2013). Depressed individuals are 40% more likely to experience premature death than those without depression (Kim et al., 2015; Penninx et al., 2013).

Nonadherence to treatment plans for medical conditions often correlates with depressive symptoms (Katon et al., 2003). Symptoms such as loss of interest, persistent sad mood, decreased energy, feelings of hopelessness, irritability, thoughts of death or suicide, feelings of guilt, decreased self-worth, poor concentration and disturbances in appetite and sleep and anhedonia make it even more difficult for people to effectively care for conditions such as diabetes (Camacho, 2014; Hansen & Cabassa, 2012; NIMH, 2019a). Further, predisposing factors for depression include history of depression in the family, medication side effects and certain physical illnesses, major stress, life changes and trauma (NIMH, 2019a; Weissman, 2014). Depression impacts an individual's ability to function daily, which is crucial for overall health (Duan et al., 2020). It is important to acknowledge difficulties tied to depression to diminish preventable deaths and increase the number of healthy people contributing to societies.

Measuring and Diagnosing Depression

It is important to accurately track trends, prevalence of depression, and monitor risk factors to continue to enhance prevention efforts, treatments and decrease the number of individuals suffering. Currently, diagnosis of depression is categorical and depressive symptoms are often measured on a continuum (Cao et al., 2020). Major differences in prevalence estimates may be due to variations in case definition or in instruments measuring depression (Karlsson et al., 2010). It is just as crucial to identify and communicate symptoms of depression so appropriate care is implemented to improve quality of life and increase their ability to adhere to treatments of other medical conditions (Cao et al., 2020).

Self-Reports

Another concern in the study of depression are the use of self-report tools as indicators instead of clinical assessment (Cao et al., 2020). Self-report screeners have caused concern given because their validity depends on the individual's ability to convey their levels of depression as well as their willingness to endorse symptoms (Brenner & DeLamater, 2016). For instance, two individuals with the same level of depression may report or perceive their symptoms significantly different (Cao et al., 2020). Therefore, such reports create limitations in the assessment and treatment. On a larger scale, those limited prevalence estimates impact practice and policy efforts that work on reducing the prevalence of depression within a community (Sohail et al., 2014).

Misconceptions

A recent study (Cao et al., 2020) was conducted to examine the potential misconceptions of depression from self-reports measures versus validated instruments

administered by mental health professionals and to revise information on the prevalence of depression in the United States. In the United States, from 2015 to 2018, the prevalence of endorsed depressive symptoms (PHQ-9 score ≥ 10) was 8%. Behavioral and demographic correlates were found across two measures such as race/ethnicity, sex, age, poverty and time spent sitting. About 1.1 million adults in the United States had symptoms of depression but did not endorse feeling depressed. Based on the results of this research, it was concluded a high presence of depression existed and a misperception among the adults in the United States (Cao et al., 2020).

Scales

There have been several measures developed in an attempt to examine externalizing symptoms in males with depression. The first was the Gotland Male Depression Scale (GMDS), which included various externalizing symptoms (Oliffe et al., 2019). Studies concluded the GMDS was unreliable (Rice et al., 2017). Later, the Masculine Depression Scale (MDS) was created but questioned due to its two-dimensional form limiting exploration of symptoms sub-domains such as emotional suppression (Oliffe et al., 2019). Consequently, the Male Depression Risk Scale (MDRS) was developed to fill in gaps in the previous version. Studies of this measure have been validating of its use. The MDRS includes drug use, emotion suppression, alcohol use, somatic symptoms, aggression and anger, and risk-taking behaviors (Rice et al., 2017). Research has indicated men who had a profile that endorsed external symptoms of depression had higher rates of a recent suicide attempt or plan (Oliffe et al., 2019; Rice et al., 2018). Further, those same external factors may create an additional barrier to seek

help (Rice et al., 2018). This MDRS was also found to be comparable to the PHQ-9 in identifying men with a recent suicide attempt (Oliffe et al., 2019; Rice et al., 2019).

Men's Perceptions

There is limited research on men's perceptions of depression, which may be a contributing factor to the diagnostic and treatment disparity. Earlier research suggested perceived severity and identification of symptoms were crucial indicators of help-seeking behavior among depressed men (Oliffe et al., 2019; Vogel et al., 2014). Social and cultural norms for males reinforce emotional and affect restrictions. It is commonly acceptable for men to hide emotions and affect, which may cause men to under identify depressive symptoms (Oliffe et al., 2019). Although women and men may be experiencing similar levels of depression, it is suggested men perceive being depressed as a sign of weakness or as a feminine characteristic. The outcome is lack of endorsement of symptoms and refusal to seek help (Cole & Davidson, 2019; Londoño Pérez et al., 2017).

Diagnosing Men

Another layer of difficulty results from the challenge clinicians have with assessing and diagnosing depression when working with male clients. Gender differences in the diagnosis of depression is thought to be due to some men's articulation of symptoms of this illness, symptoms endorsed are not specified by diagnostic criteria and widely used screening measures for depression (Cole & Davidson, 2019; Oliffe et al., 2019). Therefore, men with depression are missed or misdiagnosed and consequently untreated by providers (Oliffe et al., 2011). Discrepancies between reported symptoms by men and diagnostic criteria has suggested the need for diagnostic criteria that is sensitive to gender and other factors (Cole & Davidson, 2019; Cwik et al., 2016).

Gender Differences

Vredenburg et al. (1986) proposed prevalence of depression was much higher than what is acknowledged given males have been socially conditioned to deny feelings of depression and may be categorized as inappropriate for men. Women are diagnosed with depression more frequently than men (Lorenzo-Blanco & Cortina, 2013a; Rochlen et al., 2009) and suicide rates for males are 3 times that of females (Oliffe et al., 2019) and the perception has historically been that men are less at risk (Kuehner, 2016; Vredenburg et al., 1986). Therefore, research on men with depression has been limited and has caused disparities in treatment (Oliffe et al., 2019). Recent research has focused on gender differences and has suggested disparities between gender are correlated to differences in knowledge and perception of depression (Cole & Davidson, 2019).

Gender differences have been noted in epidemiological studies around the world and have associated internalizing disorders such as eating disorders, anxiety, somatoform, and depression to be prevalent among women whereas men lead in externalizing disorders such as impulse control, antisocial personality disorders, and substance abuse (Eaton et al., 2012). Men demonstrate symptoms of depression through anger, isolation, substance abuse as those behaviors align to accepted behavior for men. Further, it is hypothesized these symptoms are often used to mask depression and suicidality (Oliffe et al., 2011; Oliffe et al., 2019; Rice et al., 2013). Differences in prevalence rates are unclear; however, several theories have attributed variances to several biological, demographic, and social influences alongside response inclinations and service utilization differences (Eaton et al., 2012).

Gender differences have been noted for causes of depression (Kendler & Gardner, 2014; Weissman, 2014). Consistent with research, women attribute divorce, social supports, neuroticism, marital satisfaction and lack of parental affection as the cause of depression where as men mention occupation, achievements, and unstable finances. Further, hypotheses assume because caring relationships are more influential for women they then respond better to psychotherapy treatment compared to men (Cuijpers et al., 2014; Weissman, 2014).

Each year, more than 6 million males experience a depressive illness (NIMH, 2019b). Research has suggested depression is influenced by a combination of factors such as genetics, environment, and illnesses (Weissman, 2014). There is further evidence suggesting men with depression are at a higher risk of comorbid alcohol dependence and abuse compared to women with depression (Weissman, 2014). Damage caused by depression extends from physical factors to social factors. Relationships with family, intimate partners, and friends are often damaged by external behaviors displayed by men with depression (Caperton et al., 2019; Cole & Davidson, 2019). Some research has suggested men prefer others to notice changes in their behavior but would rather not concern their loved ones. Further, they would welcome support and nonjudgmental approaches when receiving help (Rice et al., 2018).

Men report major depressive disorder (MDD) symptoms at a lower rate, which has caused consideration about the level men identify symptoms of depression. Evidence suggests men with depression demonstrate impulse control issues, anger, aggressiveness, substance abuse, avoidant behaviors, and increased focus on work (Cole & Davidson, 2019; Oliffe et al., 2011; Oliffe et al., 2019; Rice et al., 2018). It is important to

acknowledge the mentioned behaviors are also risk factors for suicide (Olliffe et al., 2019). Among internalizing symptoms are unwillingness or inability to demonstrate emotions and emotional numbness. Displayed symptoms are thought to differ from the typical outline of depression, which includes sadness, sleep and appetite changes, anhedonia, guilt, and feelings of worthlessness (Cole & Davidson, 2019).

Due to the emphasis of masculine norms to evade femininity, men's opinion of depression as a gender directed issue, may be influencing a depression endorsement (Davis & Liang, 2015; Olliffe et al., 2011; Vogel et al., 2011). Customary masculine systems suggest men should not be at risk for depression. Men who identify other men with depression as weak or feminine may evade reporting personal experiences of depression themselves (Lindinger-Sternart, 2014). Therefore, these gender sensitive perceptions could embody an extra obstacle to help seeking. Men may be experiencing higher levels of distress and comorbid disorders before they opt to seek professional assistance (Caperton et a., 2019; Cole & Davidson, 2019; Vogel et al., 2014). Men who score higher on tasks that measure customary masculinity belief incline have a negative perception of psychological assistance seeking (Berger et al., 2005; Davis & Liang, 2015). For Latino men, "machismo" may play a role in delaying and avoiding treatment. Machismo describes a personal narrative that seeking health and personal care is a sign of weakness. Further, that attention to issues such as depression is not needed unless it interferes with their ability to work (Olliffe et al., 2011; Vega et al., 2010).

A recent qualitative study focused on stay-at-home fathers (SAHFs) experiences of depression and patterns when seeking mental health services (Caperton et al., 2019). Twelve individuals (one African American, two Hispanic, and nine White) from the

United States participated in this study and results demonstrated SAHFs perceived isolation, relational distress, social stigma, and changes in dependence as contributors to their depression (Caperton et al., 2019). Contrary to other studies on men (Berger et al., 2005; Davis & Liang, 2015), Caperton et al. (2019) noted participants perceived their help-seeking behavior as aligned with protecting and providing for their families and part of their definition of masculinity.

A study of 4,000 patients was conducted to investigate remission rates in people who use citalopram to treat depression. The results found a relationship between lower rates of remission in the first stage of treatment and being non-White, less educated, male and having a lower income. Gender was not suspected to influence immediate attrition (Trivedi et al., 2006; Weissman, 2014). Another study did not note gender differences in course treatment response when comparing 139 depressed male and 246 depressed females in outpatient who received various antidepressant medications. Of note, were differences in comorbid psychopathology and symptoms between women and men, which they believed was more related to help seeking choice bias (Scheibe et al., 2003; Weissman, 2014).

Men's Help-Seeking Behaviors

Males constitute one third of individuals seeking mental health services. A significant difference is found in depression and suicidality. Around 60% of men contacted health care services within the 12 months prior to completing suicide (Oliffe et al., 2019; Stene-Larsen & Reneflot, 2019). This indicates a need to investigate diversity in help-seeking among men refusing care, those in care and individuals that may be lost in follow up (Oliffe et al., 2019). Each year about 800,000 individuals complete suicide.

These deaths are a public health problem that affect society at large (Stene-Larsen & Reneflot, 2019).

Stene-Larsen and Reneflot (2019) reviewed 44 research articles from 2000 to 2017 that included 36 study reviews of individuals who contacted primary health care and 14 studies examined engagement with mental health care prior to suicide completion and concluded that highest system contacted was primary health care with an average of 80% contact. Mental health care was contacted 31% in the final year. Women and those over the age of 50, prior to suicide, contacted primary care services. Further, they concluded it is common for individuals to seek primary health care even a month before completing suicide. Therefore, it is important that primary care engages in preventative efforts (Stene-Larsen & Reneflot, 2019).

Latinos in the United States

Latinos are among the most socioeconomically disadvantaged groups in the United States (Ishikawa & Cardemi, 2014; U.S. Census Bureau, 2013). Latino income is decreasing and more than 23% of Latinos are living in poverty (U.S. Census Bureau, 2013). As prominent as Latinos are in the United States, there are many misinterpretations about the Latino population in the United States, including differences between the terms used of Latinos and Hispanics. The term “Latino” refers to individuals from particular geographical locations such as the Caribbean, Central and South America and the term “Hispanic” relates to the Spanish language ancestry of a population. Latinos are a multicultural and multiracial group. Latino also includes people with their own native tongues, and many do not speak Spanish. Immigrants have entered the United States after fleeing their homelands’ violence from drugs and gangs.

Mental health concerns vary among Latino/Hispanic individuals and reflect the strenuous circumstances and experiences this population continues to endure. Given the incredible amount of diversity among this population, it is crucial to consider the impact of diversity and personal understanding of those seeking treatment (APA, 2018). For the purpose of this study, both Latino and Hispanic terms will be used.

Immigration and Acculturation

Acculturation is a term used to identify social, cultural and psychological difficulties that initiate when an individual or groups associate with a different culture (Lorenzo-Blanco & Cortina, 2013a; Lorenzo-Blanco & Cortina, 2013b; Schwartz et al., 2010). Mexican Americans and Latino immigrants with mental disorders are less likely to encounter mental health services that align with the American Psychological Association (APA) recommendations (Davis & Liang, 2015). Compared to individuals who are more acculturated, less acculturated Latinos who have experienced traumatic events are generally more likely to endorse dissociative type symptoms (Garcia et al., 2020). Latino immigrants often experience trauma before and after migration. Depression, stress and posttraumatic stress disorder (PTSD) related to the immigration experience are specific challenges to this population (APA 2018; Garcia et al., 2020). Additionally, integration and marginalization are also particular concerns to these individuals. Depending on their legal status, fear of deportation is a concern for the entire family (APA, 2018). Individuals who have lived in countries with a history of political violence have endorsed numerous traumatic experiences. There is a need for systemic screening for related psychiatric disorders and trauma in this population (Garica et al., 2019; Rochlen et al., 2009). Latino men often endorse history of significant trauma and are marginalized in

mental health services (APA, 2018; Garcia et al., 2020; Rochlen et al., 2009). Men in the Latino community may underuse mental health services because they perceive depression as a weakness (Davis, 2015) and they have difficulty finding mental health services that align with their values and are conscious of their particular challenges (Rochlen et al., 2009), or due to difficulties in accessing medical services (Martinez-Tyson et al., 2016). Instead of formal treatment, Latino men may be inclined toward alternative resources, such as clergy or natural healers (Alarcón et al., 2014). Further, Latino men may be discouraged by the lack of available services that are culturally sensitive and additionally lack trust in larger systems (Garcia et al., 2020; Rochlen et al., 2009). Therefore, outreach efforts focused on individuals' understanding of when and where they should seek out treatment could be useful for Latino men and other subgroups of Latinos.

Various research has highlighted a relationship between level of acculturation and rates of treatment utilization of Latinos (Bridges et al., 2014). Second- and third-generation Latinos are at increased risk for substance use and suicide alongside other mental health illnesses compared to first generation immigrants (Lorenzo-Blanco & Cortina, 2013a; Lorenzo-Blanco & Cortina, 2013b). A term used to describe this phenomenon is "immigrant paradox," which describes the differences between levels of acculturation in which those who are more acculturated appear less healthy than their counterparts (Lorenzo-Blanco & Cortina, 2013a). Mental health concerns for Latinos increase in frequency when they are continuously exposed to discrimination, lower quality education and care, and their safety is continuously at risk (Garcia et al., 2020; Lorenzo-Blanco & Cortina, 2013b). As increased exposure to unsafe neighborhoods, poor education systems and achievement, discrimination, mental health issues for Latinos

become more frequent. Similarly, the risk of Latinos losing their cultural protective mechanisms such as family communication, interdependence and support, increase the longer they live in the United States (Lorenzo-Blanco & Cortina, 2013a; Lorenzo-Blanco & Cortina, 2013b).

Cultural Factors

Latino culture is collective and family oriented, and emotive styles of communications are used. There is a high importance placed on *personalismo* (personal connections and interactions) and respect for authority (APA, 2018; Hansen & Cabassa, 2012). Clinical symptoms of depression are known to vary within and among ethnic groups (Vega et al., 2010). People often refer to Spanish terms, such as “ataques de nervios,” to express symptoms such as trembling, shouting, crying, sensations of increased heat in head and chest, physical aggression, and dissociative experiences (Lima Nogueira et al., 2015). Such symptoms are associated with high amounts of comorbidity including some anxiety disorders and are perceived by those experiencing it as related to evil spirits (APA, 2018; Caplan et al., 2013; Zacharias, 2006).

Another cultural term is “colera,” which describes symptoms such as screaming, stomach pain, loss of consciousness, fatigue related to anger, and rage that disturbs inner balances. “Mal de ojo” (evil eye) is believed to be caused by another person and describes medical symptoms such as fever, vomiting, diarrhea, depression and anxiety. Effects such as tiredness and body weakness are believed to come from startling experiences and are described by the words “susto,” “miedo,” and “espanto” (APA, 2018; Lima Nogueira et al., 2015). Thus, psychological diagnoses may manifest differently across cultures and may be understood differently by clients. Current working models

may not accurately assess and conceptualize the experiences of Latinos who struggle with depression (Caplan et al., 2013; Garcia et al., 2020)

Barriers and Stigma

Among ethnically diverse populations, sentiments about endorsing depression treatments differ. Research has indicated Latinos may have a challenge adequately identifying symptoms of depression due to language barriers (Hansen & Cabassa, 2012). However, they do endorse that it is a serious illness and express hesitation about using medication to treat depression (Hansen & Cabassa, 2012; Vega et al., 2010). Stigma related to mental health is a strong barrier for Hispanic patients (Interian et al., 2010; Vega et al., 2010). Equally, lack of trust of clinicians, worries related to the effects of psychotropic medications, and beliefs that experiences cause depression necessitate attention when working with this population (Hansen & Cabassa, 2012; Vega et al., 2010). Those who believe supernatural or religious causes are involved in mental illness are less likely to use mental health services as they are using those means for coping. However, family and friends are important treatment initiation for individuals (Hansen & Cabassa, 2012). It is crucial to examine the impact patients' beliefs and norms have on their perception of treatment options for depression (Garcia et al., 2020; Vega et al., 2010). Hispanics are more likely than non-Latino Whites to believe counseling brings about bad feelings and that antidepressants are addictive (Hansen & Cabassa, 2012; Interian et al., 2010; Vega et al., 2010).

Among Latinos, stigma is thought to be a factor hindering help seeking practices (Garcia et al., 2020; Vega et al., 2010). Obtaining a label of depression may cause internalization of certain stereotypes such as a lack of personal strength (Caplan et al.,

2012; Interian et al., 2010). Negative social labeling impacts patients, and their families as others distance themselves from stigmatized individuals (Caplan & Whittemore, 2013; Interian et al., 2010; Vega et al., 2010). Additionally, stigma impacts individual's interest and adherence to treatment for depression (Caplan & Whittemore, 2013; Vega et al., 2010). Further understanding of how stigma affects Latinos is crucial in increasing care and decreasing disparities (Caplan & Whittemore, 2013; Collado et al., 2019; Interian et al., 2010). Underserved women are more likely to report concerns relating to stigma and depression treatment (Caplan & Whittemore, 2013). The use of antidepressants among the Latino population is regularly viewed as an indication of severe depression, which often is translated as an effect of illicit drugs or seen as weak or "crazy." Therefore, stigma is a significant factor that decreases treatment involvement and adherence (Collado et al., 2019).

Vega and Ang (2010) investigated the influence of stigma on the treatment of depression. Two hundred patients in primary care clinics were included in the study, all spoke Spanish and identified as Latino. Of those, 82.5% were females and 44% endorsed clinically significant depression, 73% did not graduate high school. Patients were also given a screener for stigma related to depression. Patients who endorsed higher levels of perceived stigma were less inclined to share experiences of depression with friends and family. Additionally, they were less likely to use medication for depression and had a difficult time managing depression. Further, perceived stigma positively correlated with missed scheduled visits. These researchers concluded stigma should be highly considered especially when treating Latinos for depression (Vega et al., 2010).

A significant problem among Latinos is poor medication adherence, which complicates the treatment of major depression. Stigma about medication is associated with a negative social appraisal accompanying a certain label (Collado et al., 2019; Hansen & Cabassa, 2012). Antidepressant medication is perceived to be intended for severe cases, such as “crazy people” and those who are weak and unable to handle life (Hansen & Cabassa, 2012). Substantial evidence captured the negative associations Latino patients have related to antidepressant medication. Individuals demonstrated a challenge with negative association following their diagnosis and with the initiation of antidepressant treatment. Derogatory labels associated included lazy, weak, useless, and insignificant (Hansen & Cabassa, 2012). Additionally, the risks of taking antidepressants were perceived as comparable to other drugs such as the risk for addiction, or side effects similar to being under the influence of a narcotics (Hansen & Cabassa, 2012).

A related cultural value often includes being resilient and coping with distress without the need for antidepressant. Taking antidepressants would put individuals at a higher risk for criticism from their social support (Garcia et al., 2020; Kirkpatrick et al., 2020). Therefore, it is important that these negative associations are addressed as depression often impacts a person’s self-esteem and interpersonal turmoil that would worsen with the absence of social support (Garcia et al., 2020; Interian et al., 2007). Consequences extend to social and occupational areas. For instance, some individuals may discontinue antidepressants before seeking employment (Kirkpatrick et al., 2020).

Disparities in Mental Health

Care for Diverse Groups

Effective mental health treatments are available, however, disparities in access affect immigrants and ethnically diverse individuals (Garcia et al., 2020). Depression treatment rates are low among diverse groups, including Mexican Americans (Gonzalez et al., 2010). For Hispanics, primary care is the common place in which depression care is administered (Vega et al., 2010). Research has indicated Chinese and Latinos have limited access to care, which may account for the low rates of mental health care utilization (Garcia et al., 2020).

Latinos develop diabetes at almost double the rate of non-Latino Whites and compared to other groups, they develop complications at twice the rate (Caplan & Whittemore, 2013; Hansen & Cabassa, 2012). Of Latinos seen in primary care, about 33% endorse comorbidity of diabetes and depression. In addition to social and financial barriers to treatment in this population, Latinos with limited English comprehension have difficulty navigating services, understanding information, and communicating their needs to providers without linguistic assistance (Garcia et al., 2020; Hansen & Cabassa, 2012). For some low-income Latinos, social and cultural factors influence their help-seeking behaviors (Garcia et al., 2020; Caplan & Whittemore, 2013). Further, for this population, their willingness to seek help begins in their family dynamics and expands out, exhausting resources before meeting a provider (Hansen & Cabassa, 2012). Adherence to treatment was influenced by interpersonal factors, symptom relieve, stigma and improvements in functioning (Caplan & Whittemore, 2013; Garcia et al., 2020; Hansen & Cabassa, 2012). For some, receiving respect, a warm and nonjudgmental approach

from the provider may be motivating to attend therapy and take antidepressant medication (Hansen & Cabassa, 2012).

Based on national representation studies of adults living in the United States, recent immigrants, especially those from Central America, often do not meet criteria for a mental health disorders (Bridges et al., 2014; Caplan & Whitemore, 2013). Latinos are at increased risk for not receiving evidence-based treatments for mental health compared to non-Latino Whites (Bridges et al., 2013; Garcia et al., 2020). A study conducted in 2008, defined adequate care as more than eight visits with a mental health provider or at least four visits with a provider while taking antidepressant medication (Mojtabai & Olfson, 2008). According to the study, non-Latino Whites were more likely than Latinos to receive appropriate care for their disorder by their primary care doctor (Mojtabai & Olfson, 2008). Additionally, outcomes are consistently inferior for Latinos compared with non-Latino Whites, which is largely attributed to early termination (Mojtabai & Olfson, 2008).

Studies conducted on shared decision making suggest underrepresented patients receive less health-related education, feel their preferences and agency are dismissed (Patel et al., 2014). Further disparities can be attributed to patients' concerns about cost of services, lack of Spanish-speaking providers, lack of insurance, lack of culturally sensitive interventions, transportation, and worries about deportation (Bridges et al., 2012; Garcia et al., 2020; Sanchez et al., 2016). Cost barriers for Latinos may be multidimensional; for example, childcare and work arrangements need to be made for patients to use services within available service hours, which then increases their cost of

treatment. Treatment engagement can be facilitated by enhancing resources such as assistance with scheduling, child care, and bus passes (Caplan & Whittemore, 2013).

Latinos, Depression Treatment, and Primary Care

Latinos inequalities extend to economic matters, which put them at a higher risk for depression. It is important to address issues particular to this population given Latinos constitute a noteworthy portion of the United States population (Garcia et al., 2020; Ishikawa, 2014). Latinos represented 18% of the United States population in 2019 and are forecasted to comprise 30% of the population by 2060 (U.S. Census Bureau, 2019). Latinos are included among the groups with the highest socioeconomic disadvantage and their income continues to decline, 23% of Latinos live in poverty, compared to 11.6% of European Americans (U.S. Census Bureau, 2019).

Both non-Latino Whites and Latinos have comparable rates of depression (Gonzales et al., 2010; Ishikawa, 2014). However, Latinos are more prone to underuse mental health treatments compared to non-Latino whites. In addition, they often refuse to use antidepressants (Garcia et al., 2020; Kirkpatrick et al., 2020). Latinos use medical over mental health services as a consequence of expressed somatic complaints in reaction to psychological suffering (Bridges et al., 2014; Kirkpatrick et al., 2020). Many individuals experiencing depressive symptoms seek assistance from their primary care provider rather than a mental health clinician (Ishikawa, 2014; Vega et al., 2010). Therefore, the role of the primary care clinics is important to connect patients with the appropriate care (Ishikawa, 2014). Another factor to seriously consider is the disruption in referral routes. Further, impediments to treatment underutilization for Latinos includes

lack of access or insurance, poverty, underdiagnoses, stigma, preference for support from informal sources and negative attitudes towards treatment (Kirkpatrick et al., 2020).

It is estimated 22% of Latinos who use primary care meet criteria for disorders related to depression (Menselson et al., 2008). PCPs often have the first opportunity to assess for depression in their patients and prescribe psychopharmacologic treatment to their patients. PCPs are the highest prescribers of antidepressant medications, which equates to about 8% of all antidepressant prescriptions (Mojtabai & Olfson, 2008). Even with increased efforts to include screening in primary care, a great number of Latino patients with PCP referrals to specialized care do not pursue their referral. Transportation, scheduling around multiple jobs (Caplan & Whittemore, 2013; Sanchez et al., 2016), discomfort with diagnosis, and stigma related to antidepressant medication along with lack of available providers may be adding to the disparities in treatment for Latinos (Ishikawa, 2014; Sanchez et al., 2016).

Cultural values may have an impact on Latinos' perception of recommendations for depression treatment by their PCP (Kravitz et al., 2011). For instance, many Latinos value a hierarchy of power in which authority figures such as their PCPs deserve respect and expect reciprocation (Johnson et al., 2004). Hence, PCPs recommendations are important to Latino patients. Suggestions that honor cultural values make it more possible for hesitant patients to attempt depression treatment (Ishikawa et al., 2010). Factors such as competence, openness of the provider, trustworthiness, and efficient communication may have a positive influence on Latinos accepting the referrals (Kirkpatrick et al., 2020).

Bhui et al. (2007) indicated a majority of models used in the mental health field that aim to provide culturally competent care are lacking knowledge of diverse cultures, expressions of distress, help-seeking behaviors, linguistic barriers, and belief system interactions with culture. Research has suggested ethnic diverse patients are more likely to stay in treatment when treatments are administered in a culturally sensitive manner. For Latinos, treatment engagement can be positively influenced by the presence of bicultural and bilingual therapists that can incorporate important cultural values (Caplan & Whittemore, 2013). There is evidence of this relationship for specialty mental health care (Garcia et al., 2013; La Roche et al., 2006) and medical settings (Fuentes et al., 2009), encouraging culturally competent services as it is likely to increase the probability of a patient pursuing treatment recommendations (Garcia et al., 2020; Ishikawa, 2014).

Studies have suggested Hispanics have lower treatment adherence to pharmacotherapy when compared to European Americans (Interian & Diaz-Martinez, 2007; Vargas et al., 2015). Other studies have reflected Hispanics may have a preference for using psychotherapy over pharmacotherapy as treatment (Cooper et al., 2003; Vargas et al., 2015). Another study suggested Hispanics may use antidepressant medication at a lesser rate than European Americans and may have a higher inclination towards psychotherapy than European Americans and African Americans (Cooper et al., 2003). Chen and Rizzo (2010) suggested Hispanic patients prefer a problem-solving approach, have immediate effects and are directive. When assessing for a correlation between treatment preference and treatment adherence among Latinos, research has indicated greater adherence to psychotherapy when compared to antidepressant medications (Lagomasino et al., 2017). However, follow up with treatment recommendations based

on type of referral involve not only treatment preference but more importantly, treatment accessibility. Therefore, PCP referrals should consider both accessibility and availability of the preferred treatment. Considering those factors, logistical barriers may make it more difficult for patients to adhere to psychotherapy, even if it is preferred, compared to filling a medication prescription for antidepressants (Ishikawa, 2014).

Specialty mental health care accessibility is limited for Latinos and additional barriers exist for those with limited English proficiency (Biever et al., 2011; Hansen & Cabassa, 2012). Issues accessing specialty mental health care is only part of the problem Latinos endure and may be a reason why this population prefers to be treated in a primary care setting (Dwight-Johnson et al., 2010; Vega et al., 2010). The advantage to primary care is that it provides treatments that are easy to access such as antidepressant medication and, in some settings, brief psychotherapy. Thus, even though many may prefer psychotherapy, often the default treatment may be antidepressant medication. Consideration of logistical issues in particular settings is important when examining patterns of actual treatment utilization, which often may supersede consideration of stated preference of Latino patients (Interian & Diaz-Martinez, 2007; Ishikawa, 2014).

Ishikawa et al. (2014) found 1 in 5 Latino patients who attended primary care with depressive symptoms were given referrals. The study included individuals with previous treatment recommendations from their PCP and found about half of the participants had not started treatment 3 months after their PCP consultation. Their findings align with accounts of Latino care and highlight the immediate need to enhance follow-ups for depressed Latinos in community primary care (Ishikawa et al., 2014). Some Latinos used medication treatment because it was convenient to fill their

medication after their visit with their doctor and other patients waited for 3 months for their first psychotherapy appointment (Ishikawa et al., 2014). PCPs knowledge of the wait time for psychotherapy may have been a factor in their preference for medication so they could ensure immediate care for their patients instead of risking the potential of leaving patients' depression untreated for an unknown period of time (Ishikawa, 2014).

Even in the presence of a good effort and agreement between patients and PCPs about treatment, there are convincing proposals to consider that treatment accessibility being inhibited may prevent effective use. Among Latinos, collaborative and integrative care models have been efficacious in improving treatment access and use, therefore, there is a strong suggestion for an increase in the employment of these type of models of care (Cabassa & Hansen, 2007; Dwight-Johnson et al., 2010; Ell et al., 2011). Integrated care has demonstrated an improvement of perception and treatment engagement among diverse populations. Positive changes have been observed in the collaboration between primary care providers and mental health care clinicians (Chapa, 2004; Ishikawa, 2014).

Treatment Efforts

To ensure effective treatment of comorbid medical conditions and cost efficiency, the Patient Protection and Affordable care Act was implemented in 2010 (Horevitz et al., 2015; Lantican, 2016). The integration of primary care and mental health is considered most effective for diverse groups (Sanchez et al., 2016). Underrepresented populations have less access to mental health care (Caplan & Whittemore, 2013). Therefore, policy makers continue to endorse the integration to increase quality of care, access and lower costs. Primary care locales are unique in that they offer an opportunity to provide health promotion, preventative care, and depression treatment (Hansen & Cabassa, 2012).

Research data have indicated Latinos may prefer to attend to a primary care setting for mental health treatment (Lantican, 2016; Sanchez et al., 2016). Behavioral health consultation in primary care can improve adherence to depression treatments making it possible to assist most patients presenting with depression in primary care clinics (Serrano & Monden, 2011).

Integrative Care

Integrated behavioral health care (IBHC) is a model used in primary that includes behavioral health (BH) to reduce stigma and barriers to services (Bridges et al., 2014; Torrence, 2014). Evidence has shown this model has helped reduce the cost of care as well as enhancing patient outcomes (Berge et al., 2017; Torrence, 2014). However, it is unclear which components of integrated BH care are most effective and when to use them, such as warm handoffs, preventative care visits, and treatment-focused visits. Other researchers have suggested referrals to BH via targeted workflows. There are considerable gaps in current literature relating to the specific work with diverse and low-income populations (Berge et al., 2017).

PCBH Model

The Primary Care Behavioral Health (PCBH) model of services has been widely used in various settings such as the United States Department of Defense (Miller et al., 2014; Reiter et al., 2018), community health, university health centers (Peek et al., 2014; Reiter et al., 2018; Torrence, 2014), U.S. Veterans Health Administration (Hunter et al., 2017; Reiter et al., 2018; Sadock et al., 2014), and residency programs for family medicine (Reiter et al., 2018). This model is team based to assist in overseeing

biopsychosocial affected health conditions and behavioral health problems in primary care (Hunter et al., 2017; Reiter et al., 2018).

Behavioral health consultants (BHCs) support the team and primary care providers (PCPs) and act as extensions of PCPs (Reiter et al., 2018). BHCs are accessible, provide high volume services, act as generalist and often provide psychoeducation. As consultants, BHCs help PCPs improve their biopsychosocial approach to the care of health conditions (Hunter & Goodie, 2010; Hunter et al., 2017; Reiter et al., 2018). BHCs assist patients of various ages and health conditions such as substance misuse, diabetes, hypertension, child behavior problems, smoking cessation and healthy eating (Hunter & Goodie, 2010; Reiter et al., 2018). Their goal is to see as many patients as possible in a given day by sharing resources and assisting the team whenever possible (Hunter & Goodie, 2010; Reiter et al., 2018). Accessing a high volume of patients is possible due to their use of focused visits that typically range from 15–30 minutes. Visits focus on functional improvement targeting specific symptoms (Hunter et al., 2017; Reiter et al., 2018). Follow-up visits are usually scheduled with both the BHCs and PCPs until improvement begins. Once improvement initiation is achieved, the BHC is engaged as needed (Reiter et al., 2018). However, if there is no improvement, the patient may be referred to specialized care. BHC continues care if specialty care is not accessible to patients (Reiter et al., 2018).

To help specialty mental health care in serving those who need it the most, PCBH strategies focus on treating individuals in house. Under certain circumstances people are connected to specialty care and after consulting with BHC (Reiter et al., 2018). For instance, if an individual fails to respond to the care of PCP and BHC, special request is

made for specialty care by the patient or if the PCP recommends additional guidance through other resources. Additionally, if it is estimated the individual may not respond well to treatments such as individuals with chronic complex problems and those who make unadvised changes to their health care routine (Reiter et al., 2018).

The PCBH model encourages team-based approaches at different levels. One of the strategies is sharing clinic resources (Hunter et al., 2017; Reiter et al., 2018). It is common for BHCs to flexibly use available exam rooms for visits with patients. Also, BHCs are encouraged to gather educational material and create new clinical pathways. BHCs flexibility to attend to the clinic's needs is crucial. They manage schedule patients as well as taking urgent calls from patients or managing agitated patients in the lobby, completing forms to assist PCPs. Often, patients have back-to-back appointments with BHCs and PCPs to eliminate barriers for patients (Reiter et al., 2018).

Care plans developed and reinforced by both the PCP and the BHC are commonly used. These plans are developed with both impressions in mind and a plan that acknowledges both roles in which the BHC will help the patient adhere to PCPs recommendation and the PCP will follow up with the patient about BHC strategies. There is constant communication between both providers about current information and progress in the patient's care. Patients are sent home with resources emphasizing that strategy (Reiter et al., 2018).

The purpose of warm handoffs is to facilitate access to behavioral health care services and to increase the probabilities of a patient to attend their follow-up behavior health appointments. Warm handoffs have been a part of the integrated care practices for some time now (Blount & Miller, 2009; Cohen et al., 2015; Reitz et al., 2011); however,

medical clinicians have been unable to use them fully due to the demand BHCs have in clinics. Practices for warm handoffs encourage medical clinicians to use a warm handoff at their discretion to benefit a patient in need of emotional, relational and mental health services. The medical clinician and the BHC will go into the exam room at the same time and explain a holistic approach as best care practices. The BHC use the allocated time during the warm handoff to normalize their experience, validate, stabilize, and educate the patient as needed. Additionally, the BHC introduces additional services provided by the clinic or community resources available to the patient. Lastly, future BH appointments are discussed and scheduled for the patient (Berge et al., 2017).

Integrated primary care engages patients in treatment and, for Latinos, connection is relevant as it increases trust with their primary care provider (PCP) who then facilitates face-to-face interactions with mental health providers through warm handoffs. This type of connection may be familiar and highly valued to the Latino culture as it establishes a sincere and personal connections. A warm handoff is alleged to increase the probabilities of early commitment to treatment and lessen mental health stigma (Horevitz et al., 2015; Manoleas, 2008)

Among other team-based approaches are biopsychosocial clinical pathways. Pathways endorse regular engagement with BHC to care for patients with certain conditions such as depression. Using standardized workflows that indicates the clinician providing a certain type of care, timing of engagement, and length of treatment depending on the group (Reiter et al., 2018). Often, pathways are created to be used for one or two illnesses only. These pathways can be considered as reactive to problems and not a preventative measure as well as not commonly available to supply the need (Berge

et al., 2017). Pathways can be as simple as specifying patients with a high score on a depression measure such as PHQ-9 receives a warm handoff to a BHC. Complexity of pathways can differ and some may include actions for other team members to engage including the BHC (Reiter et al., 2018).

For instance, a clinic may choose a population such as patients with depression to begin a clinical pathway as a way to improve care. In this case, the patient will see their PCP first and would be screened for depression by the medical assistant, which is a common practice (Reiter et al., 2018). If results of the screener indicate possible depression, the medical assistant would inform the PCP. Upon further assessment the PCP may prescribe antidepressant medication and initiate a warm handoff with BHC. During the warm handoff, the PCP could suggest the 2-week follow up visit for new prescription for antidepressants be with the BHC. This would allow the PCP to attend to all their patients (Reiter et al., 2018). In accordance with the clinical pathway, the BHC assesses the patient further, completes appropriate assessments and tailors self-management course of action. The PCP could also encourage the patient to make contact if questions arise while using the medication (Reiter et al., 2018).

If the patient has questions at the follow up with the BHC, the BHC consults with the PCP before the visit is over to answers questions (Reiter et al., 2018). The BHC relays the message to the patient from the PCP in cases such as side effects of medication. This communication includes a potential follow-up visit with the PCP if needed or if side effects of medication persisted passed advised time period (Reiter et al., 2018). Clinical pathways also increase productivity given they use screening regularly and can identify new cases that would benefit from clinical pathway services.

Consequently, more patients are able to meet with BHC and facilitate care to every patient (Reiter et al., 2018).

Rationale/Purpose of the Study/Significance of the Study

Stigma, acculturation, cultural values and financial difficulties have been poorly addressed in the field as it relates to Latinos (Collado et al., 2019; Hansen & Cabassa, 2012). These barriers contribute to the absence of treatment for depression in traditional settings. Most Latinos consult with primary care providers and find symptoms are more related to mental health than physiological causes (Lantican, 2016). However, there is limited research related to men struggling with depression. Due to the implications it has on family dynamics and overall health (Garcia et al., 2020), it is crucial that this topic is researched and talked about among communities and societies at large.

Most Latinos see their primary care doctor for mental health concerns such as depression (Garcia et al., 2020). Therefore, it is crucial to examine the efficacy of treatments used in clinics. To reduce disparities in treatment of mental health, integrative approaches such as the primary care behavioral health (PCBH) model, have incorporated strategies such as primary care visits the same day as behavioral health visits (Hunter & Goodie, 2010; Reiter et al., 2018). Additionally, this model creates clinical pathways to ensure populations receive adequate care (Reiter et al., 2018). This research aims to examine the effectiveness of a depression pathway created in a primary health care organization in the greater Seattle area.

Given the limited amount of research related to Latino men, this study aimed to offer preliminary data on Latino men presenting with depressive symptoms in primary care that are a part of the depression pathway group in an effort to examine the efficacy

of clinical pathways for this particular population. This research suggests practices for outreach, planning, and implementation of culturally sensitive mental health care for this population.

Research Questions/Hypotheses

Research indicates Latino and non-Latino White males equally average less than two visits for treatment. In the Latino population there is a higher rate of stigma related to medication to treat depression as it is can be perceived as addictive (Vega et al., 2010; Hansen & Cabassa, 2012). Studies have also indicated, for Latinos, engagement with behavioral health can be beneficial for the treatment of depression (Serrano & Monden, 2011), this researcher seeks to examine how this factor impacts symptom reduction. This researcher examined patterns among Latino men in primary health care clinics engaged in depression clinical pathway strategies. Escovar et al. (2018) used data from one of the largest intervention studies for adults, including Latinos in primary care clinics, and found Latinos average 4.44 office visits for mental health concerns. The effectiveness of depression pathway plans, which include warm handoffs was examined through consequent treatment utilization (psychotherapy and medication), symptom reduction, and treatment adherence. Differences between Latino men and non-Latino White males were noted.

H1: Latino males participating in the depression pathway have lesser rates of engagement with behavioral health within the clinic in comparison to their non-Latino White males. Engagement was planned to be measured by the average number of visits with a behavioral health consultant (BHC) following the recommendation of their primary care provider (PCP).

H2: Latino men have lower rates of medication adherence compared to non-Latino White males. The intention was to measure this factor by the number of antidepressant medication refills within a 12-month period.

H3: Latino males on the depression pathway would endorse a greater symptom reduction than non-Latino White males. This was intended to be measured by comparing PHQ-9 scores at the initial visit with their primary care provider and following their visit with behavioral health consultant. This aimed to measure the effectiveness of treatment plan and adherence.

H4: Latino men would have more office visits compared to the nation average for Latinos. The comparison used the national average number of office visits for Latinos.

Chapter 2

Primary care providers are often the first to be contacted by Latinos for mental health care needs (Garcia et al., 2020). The primary care behavioral health (PCBH) model includes the implementation of strategies such as clinical pathways to monitor the care of certain populations (Reiter et al., 2018). In this case, primary care clinics in the greater Seattle area have created a depression pathway to increase quality of care for depressed patients. The goal of this study was to evaluate treatment utilization and treatment adherence for depression among Latino males and how this group compares to non-Latino White male patients in primary care clinics across the greater Seattle area that use the PCBH model and a depression pathway. Routine PHQ-9s were used to measure change over time for these groups and those patients who chose to follow up with BHC, antidepressant medication, or both types of treatments. A quantitative methodology was used for this research to examine the efficacy of depression pathways. Correlations were used to analyze possible relationships between treatment outcomes and patients' profiles.

Participants

Clinics located in the greater Seattle area that use the PCBH model and a depression pathway were recruited through email introductions. A depression pathway is a strategy used by clinics to identify depressed patients that can benefit from a plan created by the health care team (PCPs and BHCs) to reduce symptoms and improve overall function. The depression pathway is activated for an individual with an elevated PHQ-9, assessed by a PCP and has been identified as a patient who can benefit from a targeted plan. The plan may include a medication prescription and follow-up visits with a BHC. Clinics were asked to export reports of individuals meeting all the criteria for this

study. Consistent with ethical guidelines, state and federal laws, participants' identity was kept confidential. According to the policy of the clinics, all patients signed a release of information for research purposes.

Archival data were retrieved from clinics' electronic health care record (EHR) for review of adult patients who self-identified as Latino/Hispanic males, and non-Latino White males, 18 years of age and older, had a PHQ-9 score of 10 indicating moderate depression or higher and engaged in the depression pathway between January 2019 and January 2020. Data were retrieved electronically, deidentified and documented in a Microsoft Excel spreadsheet. Variables included limited demographic information and service criteria for follow-up appointments. Charts with missing criteria and data were excluded from the analysis. No deception was used during the length of the study. There was minimal risk to participants, and no compensation was provided.

A statistical power analysis was computed to estimate sample size. A modest estimated effect size of 0.15 was elected to assist in reducing risks for Type I errors. Two groups were represented in the power analysis. Using a power = 0.80 and an alpha = .05, the proposed sample size with this effect size is approximately $N= 176$.

Materials and Procedure

Participants included in this study completed a PHQ-9 at the time of their visit with their primary care provider and at most follow-up visits. Reports were pulled from the health clinic's database by a clinic employee and exported to an Excel spreadsheet in which they were assigned a participant identification number. Identifiable information such as names and contact information for each participant was not exported and

remained excluded from all spreadsheets. The file containing research data was encrypted and password protected in a laptop.

Assessments

The PHQ-9 is routinely given to each patient to fill out in the health clinic before seeing their provider. This protocol has been instituted by the agency and all disclosures and agreements are signed by the patient before their initial visit as a requirement for services provided. This can often be the first alert about possible depression in a patient during a routine primary care visit (Reiter et al., 2018) and consequently, potential candidates for the depression pathway can be identified.

The Patient Health Questionnaire-9 (PHQ-9) is a 9-item self-report questionnaire widely recognized and used for screening, monitoring, diagnosing, and measuring the severity of depression with scores ranging from 0 to 27 (Olliffe et al., 2019). Scores 1–4 suggest minimal depression, scores 5–9 suggest mild depression, 10–14 suggesting moderate depression, 15–19 suggesting moderately severe depression, and 20–27 suggesting severe depression. This tool has been deemed as a psychometrically sound and has excellent test-retest reliability (Mitchell et al., 2020). The PHQ-9 mirrors criteria for depression used in the *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition* (DSM-5; Mitchell et al., 2020) and to increase the validity of the assessment, providers are required to be trained on scoring and interpreting the PHQ-9. The PHQ-9 is often a chosen tool because of its high validity (Mitchell et al., 2020).

Follow up criteria included any visit following their first PCP visit. This includes patients who did and did not attend their BH appointment after their referral regarding

depression symptomology. Criteria for medication was prescription filled for antidepressant medication or request for refills for such medication.

Data Analysis

An independent sample *t* test was used to examine hypothesis one. To test the second hypothesis, an independent sample *t* test was conducted excluding participants who were not prescribed medication by a provider. A two-way repeated measures analysis of variance (ANOVA) evaluated the third hypothesis and test treatment outcome criteria. Variables that did not meet the statistically significant standard ($p < .05$) were excluded from the analysis model. Final review noted significant interactions ($p < .05$). All tests were based on a p value $< .05$, which was analyzed using SPSS.

Summary

I examined archival data of two groups of patients who scored high in the PHQ-9 and were placed in a depression pathway. Patterns were analyzed related to treatment utilization and treatment adherence following their initial encounter with their primary care provider. I examined effectiveness of the depression pathway as it relates to treatment adherence for Latino men and how they compare to non-Latino White males. Outcomes of treatments were measured by follow-up visits, medication utilization and changes in symptoms of depression. Clinical criteria were scores on PHQ-9, depression diagnosis, and a prescription for antidepressants.

Chapter 3

The purpose of the present study is to provide initial insight into the effectiveness of depression clinical pathways for Latino men who endorsed depressive symptoms in primary care. This quantitative study analyzed 12 months of archival data, which included White non-Latino and Latino males. A total of 146 of participants who endorsed moderate to severe depressive symptoms in a primary care clinic were included in this study.

Participants, self-endorsed race and ethnicity as followed: 114 White-non-Hispanic or Latino, 17 identified as White-Hispanic or Latino, 2 other Pacific Islander-Hispanic or Latino, 1 reported more than one race-Hispanic or Latino, and 12 declined to specify-Hispanic or Latino. For the purpose of this study these group were counted as follows: 114 White males and 32 Hispanic males.

Analytic Strategy

Using the electronic health records systems of participating clinics, data were exported to SPSS for statistical analysis for patients who engaged in a depression clinical pathway and met criteria for the study. Participants who did not have data for all factors analyzed for each hypothesis were excluded. Engagement in a clinical depression pathway was defined by the clinics as anyone engaged in treatment after an elevated PHQ-9 score, which is a 9-item questionnaire to assess for symptoms of depression and commonly used in medicine.

The number of visits with either their primary care provider (PCP) or with behavioral health consultants (BHCs) were analyzed for differences between White males and Hispanic males, using a between subjects *t* test. The data exported included a total of

days between visits for each patient, an average of the number of days between visits was taken to assess for differences between the two groups using a between subjects *t* test. An average of the PHQ-9 scores upon intake was compared to their last PHQ-9 score recorded. Averages were used to compare scores between White and Hispanic males using a two-way repeated measures analysis of variance (ANOVA). A one-sample *t* test was used to analyze the average number of visits for Latino men and compared to the national average of mental health visits for Latinos in the United States. Due to the lack of research available regarding the number of visits to mental health, data were compared to national average for Latinos seen in a medical setting for mental health concerns.

Results

Hypothesis 1 – Latino Men Engagement and Ethnic Differences

Engagement in treatment, any visit subsequent to their first visit with their primary care provider (PCP), was used as a way to measure engagement for men participating in the depression pathways. I hypothesized Latino males would engage at lesser rates than non-Latino White males. A between subjects *t* test showed there were no significant differences in number of visits between White males ($M = 1.55$, $SD = .99$, $n = 111$) and Hispanic males ($M = 1.63$, $SD = .83$, $n = 32$), $t(141) = -0.39$, $p = 0.94$ (see Tables 1 and 2).

Table 1

Group Statistics

	Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SEM</i>
Number of visits	Whites	111	1.55	0.99	0.09
	Hispanics	32	1.63	0.83	0.15

Table 2*Number of Visits*

Number of Visits	<i>p</i>	<i>t</i>	<i>df</i>	Sig (2- tailed)	Mean Difference	Std Error Difference	95% CI of the Difference	
							Lower	Upper
	0.94	-0.39	141.00	0.70	-0.08	0.19	-0.46	0.30

Hypothesis 2 – Medication Adherence

Medication adherence was proposed as a measurement of treatment adherence while in the depression pathway. This researcher hypothesized Latino men would have lower rates of medication adherence during a 12-month period. However, antidepressant medication pickups and refills records were not available for this study.

Hypothesis 3 – Symptom Reduction

PHQ-9 scores at first visit with their PCP were compared to last recorded PHQ-9 scores for each group as post scores given data may have been missing on patients who had interactions with a BHC. I hypothesized Latino males on the depression pathway would endorse a greater symptom reduction than their counterparts, which would be reflected on lower PHQ-9 scores over time. This analysis included 39 White males and 14 Hispanic males; patients for whom there were no pre and post scores were excluded. The lack of scores recorded may be due to patient not filling out a form during a visit or lost data. A two-way repeated measure ANOVA that included a main effect of ethnicity, a main effect for time, and an interaction between ethnicity and time was conducted. The results are as follows and Table 3 includes descriptive statistics for the mentioned analysis.

Table 3*Descriptive Statistics*

Variable	Mean	SD	n
PHQ-9 Whites (1)	18.97	3.93	39
PHQ-9 Hispanics (1)	20.07	5.08	14
PHQ-9 Combined Totals (1)	19.52	4.28	53
PHQ-9 Whites (2)	17.54	5.24	39
PHQ-9 Hispanics (2)	16.71	4.95	14
PHQ-9 Combined Totals (2)	17.13	5.13	53

Note. PHQ-9 (1) = First recorded PHQ-9; PHQ-9 (2) = Last recorded PHQ-9 score.

For differences between ethnicities, there were no statistically significant difference found between Whites ($M = 18.97$, $SD = 3.98$) and Hispanic males ($M = 20.07$, $SD = 5.08$) PHQ-9 scores during their first visit and last recorded scores for Whites ($M = 17.54$, $SD = 5.24$) and Hispanics ($M = 16.71$, $SD = 4.95$), $F(1, 51) = .01$, $p = .91$, $\eta p^2 = .000$.

Hypothesis 4 – Average Number of Visits

A comparison of number of visits while engaged in the depression clinical pathway and national average of visits by Latinos in the United States provided insight into the efficacy of clinical pathways such as the depression clinical pathway examined here. I highlighted number of visits of Hispanic males within this study ($M = 1.63$, $SD = .83$, $n = 32$). Average number of visits for Latinos in the United States is 4.44 (Escovar et al., 2018). There was a significant difference found between study group average number of visits compared to the national average for Latinos (see Table 4).

Table 4*Number of Visits by Hispanics and National Average (4.44 Visits per Capita)*

Number of Visits	<i>t</i>	<i>df</i>	Sig. (2-tailed)	Mean Difference	95% CI of Differences	
					Lower Bound	Upper Bound
	-19.12	31	0.00	-2.82	-3.12	-2.51

Additional Finding

For the interaction between ethnicity and changes in PHQ-9 scores, there was no statistically significant finding, $F(1, 51) = 1.12, p = .30, \eta p^2 = .021$ that would demonstrate PHQ-9 scores changed over time based on ethnicity (see Table 5).

Table 5*Changes in PHQ-9 Scores*

	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>	Partial Eta Squared
Changes in PHQ-9 scores	1.00	118.33	6.97	0.01	0.12
Changes in PHQ-9 scores * Study Group	1.00	19.01	1.12	0.30	0.02

There was a significant effect found in changes in PHQ-9 scores. First PHQ-9 scores means were higher than last PHQ-9 scores means regardless of the group (see Table 6).

Table 6*Main Effect of Time*

	<i>M</i>	<i>SE</i>	95% CI	
			Lower Bound	Upper Bound
1st PHQ-9 Score	19.52	0.67	18.18	20.86
Last PHQ-9 Score	17.12	0.81	15.51	18.74

A between subjects *t* test showed there were no significant differences when assessing number of days that passed between their first PCP visit and a visit with BH

between White males ($M = 38.04$, $SD = 57.60$, $n = 114$) and Hispanic males ($M = 49.03$, $SD = 75.01$, $n = 33$), $t(145) = -0.90$, $p = 0.37$ (see Table 7).

Table 7

Days Between Visits

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>
Whites	114	38.04	57.60	5.40
Hispanics	33	49.03	75.01	13.06

Summary

The research conducted was in hopes to provide initial and basic information about Hispanic males engaged in a depression clinical pathway and how the effectiveness of such treatment modality may differ from their White counterparts. This study includes a sample of 114 White non-Hispanic males and 32 males who identify as Hispanic. All of these participants were included as they endorsed symptoms on the PHQ-9, which added to scores that crossed the cutoff into moderate to severe depression. An average number of visits, days between visits, and PHQ-9 score changes for each group were analyzed for differences between groups. Originally, the study also aimed to analyze medication treatment adherence for these patients, but pertinent data were not available.

Statistical analysis was conducted in SPSS that included factors that are key in the recognition of treatment efficacy for Hispanic men. A between subjects t test found there was no statistical significance between groups in the number of visits during their engagement in a depression clinical pathway. Using the same analysis, analytical data showed there was no difference between White males and Hispanic males in the number of days that passed between visits. However, there was a significant difference between the national average of visits for Latinos and the average number of visits for the studied Latino group suggesting the latter group averaged a lower number of visits. A two-way

repeated measures ANOVA used to test for the interaction between symptom reduction demonstrated no significant effect of the participants and no interaction between the groups and time. However, there was a significant effect found in PHQ-9 initial scores and end score that demonstrated scores were on average lower at time two, which was their last recorded visit during the analyzed year. This finding suggests the depression clinical pathway was significantly helpful for both group of men.

Chapter 4

The purpose of this study was to analyze the effectiveness of a depression clinical pathway for Latino men. Findings from this study will be discussed and interpreted in the following sections. In addition, limitations, considerations and suggestions for future research will be presented.

Interpretation

This study did not find a significant difference in rates of engagement between White and Latino males while participating in a depression clinical pathway, which may suggest no utilization differences based on ethnicity. No data were available to analyze rates of medication adherence for each group. Similarly, there was no significant finding in symptom reduction between males, which posits both ethnic groups endorse symptoms similarly. However, there was a statistically significant finding between initial PHQ-9 scores and last visit recorded PHQ-9 scores when both groups of men were combined. The significant finding may suggest depression clinical pathways are effective for treating men who endorse depressive symptoms. Findings of this study suggest there is a disparity in treatment utilization within the Latino males studied given their average number of visits were significantly less than the national average for Latinos.

Influential Factors During Data Collection

The electronic health record system showed no information regarding medication acquired by participants, which may be a factor in depression management and engagement with mental health services. The archival data used in this study may have also been impacted by a few unanticipated events. One of the events was an attack using a ransomware virus on the computer system of the clinics, which led to computers

shutting down and all hard drives wiped. Because depression clinical pathways involve various team members, approaches, and a great number of interactions even before the patient is seen by their provider, there is room to consider data may have been missing or excluded. Although every precaution was taken to use and analyze the data to its fullest extent, this is a consideration worth nothing. Additionally, the electronic health system does not always adequately log and isolate those patients participating in a depression clinical pathway. It is also worth considering some patients fail to fill out a PHQ-9 questionnaire at each visit or that depression is addressed when there are coexisting illnesses that impact the research sample. There is also the possibility for human error during the initial data collection when a provider may forget to document care.

Integration

Primary care visits are often the first contact for Latinos when experiencing depression (Garcia et al., 2020; Vega & Ang. 2010). Studies conducted in the United States have suggested the average number of visits is 4.44 among Latinos, which includes males and females. The study further denied any statistically significant difference in the average number of visits between Latinos and non-Latino White participants (Escovar et al., 2018). The integration of mental health services that work alongside medical visits have been helpful for treatment care for Latinos (Garcia et al., 2020) as efforts to enhance treatment include clinical pathway aimed to increase chances a patient will use treatment (Berger et al., 2017; Reiter et al., 2018). Research has indicated warm handoffs, which are often critical in a clinical pathway, have a positive impact on Latinos given the concept aligns with values the Latino culture holds, decreases stigma and increases initial commitment to treatment (Horevitz et al., 2015; Manoleas, 2008). These warm handoffs

entail helping connect the patient with eligible providers to provide a more personal and comprehensive level of care. However, there is no available research that specifically addresses if depression clinical pathways are effective at treating depression in Latino men who generally use services at a lower rate. The warm handoff also uses the value of relationship to enhance healthcare. The primary intention of the present research is to provide initial data that may encourage further research on this particular population by exploring two components of the depression clinical pathway: treatment engagement and symptom reduction.

Treatment Engagement

According to research, Latinos in the United States face particular challenges (Garcia et al., 2020; Ishikawa, 2014; Lorenzo-Blanco & Cortina, 2013a) and these factors are thought to cause psychological distress (Bridges et al., 2013). Various aspects such as quality of treatment and stigma have supported that there are significant disparities among diverse ethnic groups (Mojtabai & Olfson, 2008). Research has highlighted that Latinos are at risk to underuse mental health treatment compared to Whites and commonly refuse antidepressants (Garcia et al., 2020; Kirkpatrick et al., 2020). Therefore, the initial comparison of treatment utilization between White males and Latino men was important and hypothesize Latino men would engage at a lesser rate given the cultural stigma surrounding mental health services in the Latino culture. This study found no indication Latino men significantly use treatment at a lesser rate than their counterparts. This result aligns with research indicating Latino and Non-Latino White males have relatively similar average number of visits for treatment, which is less than two visits among men (Hansen & Cabassa, 2012; Vega et al., 2010) and 4.44 primary

care visits on average for both groups including males and females (Escovar et al., 2018). This could be indicative of gender more than ethnic differences between the groups.

There is a possibility that men do not return for a second visit for mental health issues, which is important to recognize as it may help tailor the first visit encounter.

Unfortunately, despite the expectation at the proposal of this study, data were not made available to provide insight into differences in medication adherence between these two groups. Research has been unclear about medication as treatment among Latino men with some research suggesting Latinos prefer medication because they can pick it up on their way out of their doctor's visit (Ishikawa et al., 2014). Other research suggest stigma related to medication and perceived potential for addiction is a barrier for using medication to treat depression (Vega et al., 2010).

Lastly, hypotheses four in this study aimed to examine treatment utilization patterns of Latino men and how they compare to the national average number of visits among Latinos seeking mental health services. Research including the average number of visits to specialty mental health services was not found by this researcher. Therefore, a research study on medical visits for mental health issues was used instead. The national average number of visits for mental health concerns was significantly higher (4.44) than the average number of visits of Latino men in this study (1.63). The national average includes females, which may account for the higher number of visits. This comparison could be helpful in advocating for treatments that work well for Latino men, such as respectful, nonjudgmental, and warm approaches (Hansen & Cabassa, 2012), which align with clinical pathway approaches (Reiter et al., 2018). Additionally, knowing men on

average engage in treatment for less than two visits may help increase efforts during the first visit for males in a way that will promote further engagement for treatment.

Symptom Reduction

There were no significant differences between the two groups when symptom reduction was examined using the PHQ-9 scores. The hypothesis in this research included that Latino men would endorse symptom reduction at a higher rate than their counterparts given previous research has indicated, among Latinos, being labeled with depression may cause acceptance of stereotypes that relate depression to lack of personal strength (Caplan & Whittemore, 2013; Interian et al., 2010), which may have led to underreporting of symptoms in an effort to remove the label of depression. Qualitative research representing Latinos indicated evasion of labeling by opposing diagnosis and treatment (Vega & Ang, 2009). The average PHQ-9 scores for the groups were higher initially (19.26) than their last recorded scores (17.32), which indicates engagement in the depression clinical pathway was beneficial to all engaged in treatment.

Limitations

This study used archival data exported from electronic health records (EHRs) from primary care clinics that use an integrative model of work and may not represent Washington State or National population numbers. The selected time period of 12 months was chosen to prevent inconsistent information due to the worldwide pandemic of COVID-19, which impacted patient ability to enter clinic and may have limited general patient contact. Furthermore, due to clinic procedures, I was unable to know what information could and could not be provided to aid this study due to clinic's policy restrictions. Clinic administrators could not disclose any information prior to their IRB

approval, which required to be completed after researcher's study was approved by the researcher's university IRB approval.

This study used a small sample size and did not include a control group. There was also an unequal number of participants representing the two groups with Hispanics being less than half of the participants compared to their counterpart. PHQ-9 scores were a crucial part of this study, which could have benefitted from additional measurements of depression to assess symptom reduction. This study largely addresses depression related diagnoses, but diagnoses were excluded from this study as a criterion for participants given the potential for exclusion.

EHR record system used did not allow to track the number of times a prescription of antidepressants was written for a particular patient. Further, records are not connected to outside pharmacy agencies and their service to patients as well as in-clinic pharmacy prescription pick-ups and refills. An integrative system could have been useful in this study to examine the pharmacological factor of treatment. There was a lapse in PHQ-9 records for each visit per participant, therefore only allowing to capture limited initial score and last reported PHQ-9 scores, which may have been due data storage affected by the computer wipe outs. This may also be due to the lack of consistency in screening, which often happens before patients see their PCP. Additional length of time to cover more than 12 months could have been beneficial to further understand patterns and efficacy. Unfortunately, there is a limited number of studies that included pertinent and specific information related to mental health concerns in the Latino population. This is consistent with many of disparities in this population. There was no conflict of interest in this study between researcher and involved clinics.

Future Directions/Recommendations

Future research could benefit from a mixed methods studies that includes patient interviews and their own account of their treatment of depression. There can also be a larger comparison between patients who only see their primary care provider and those who see behavioral health additionally to their PCPs. This would help understand possible mediators and moderating factors in the effectiveness of depression clinical pathways. Clinics may benefit from having an organized way to keep track of patients engaged in clinical pathways that will assist in follow ups and treatment adherence monitoring. Keeping track of contributing clinicians could be beneficial to patient care as there can be insight into the effectiveness of each field such as medicine, psychology, social work, nutrition and targeted efforts from each discipline, especially for patients with comorbid illnesses. Additional measures or feedback questionnaires that can be given to patients after each visit or every so often can be helpful to track patient satisfaction and hear suggestions from patients on what changes they may like to see and can that can be of benefit.

In regard to future research addressing disparities among Latinos, research can focus on outreach efforts and the impact on lowering the risk for patients to fall between the cracks. I suggest clinics have outreach efforts relevant to each population such as voicemails in Spanish and other languages. Adding clinicians and medical staff who resemble patients can be beneficial as it may impact patient relationship with the clinic. Having clinicians who speak the primary language of the patient, instead of using translating services, may increase communication and patients' agency.

To decrease the barrier of time, childcare and transportation for more vulnerable populations, I suggest in-home care or telehealth visits. Clinics could increase their partnership with organizations that provide transportation for appointments.

Organizations may contribute to decreasing barriers by providing vouchers, childcare during clinical visits and other type of incentives such as three free visits with behavioral health. For patients with literacy issues or physical impairments, video or other means of communications of psychoeducation can start in the lobby while they wait for their provider.

For Latino men, additional instruments can be used to track depression symptoms in a more effective way and in various languages that reflect their understanding of symptoms. If time is a concern and a barrier for men in this population, telehealth visits that are shorter and available at a later time of the day, may be highly beneficial as they may minimize time away from their family. Behavioral health can also pursue warm handoffs during all visits with men to quickly assess and educate on services. This would suggest an increase of employed psychologists working in primary care for these types of visits.

Warm handoffs were designed to increase the likelihood of engagement to treatment and decrease stigma related to mental health (Horevitz et al., 2015; Manoleas, 2008). This strategy may be particularly beneficial to the Latino population as it mimics a personal relationship, which is highly valued in the Latino culture. The introduction by the primary care provider to other team members may increase trust in other providers, support understanding and navigation of the United States health care system. For Latino men in particular, warm handoffs are opportunities to receive psychoeducation

decreasing stigma related to mental health concerns as well as receive short interventions for their particular concern. In some cases, behavioral health consultants schedule a follow-up visit. Efforts could be made in clinics to prioritize male patients to receive a warm handoff during their first visits or even while they wait to be seen by their primary care provider.

Conclusions

This study examined the efficacy of depression clinical pathways on Latino and non-Latino White men. Factors included were treatment adherence measured by clinical visits and symptom reduction measured by comparing PHQ-9 scores. Barriers such as stigma, which are particular to the Latino populations, have contributed to the absence of treatment in traditional treatment setting (Collado et al., 2019). Research is very limited on Latino men with depression (Garcia et al., 2020) and because integrated approaches such as clinical pathways have been found to be effective in increasing treatment accessibility (Cabassa & Hansen, 2007; Dwight-Johnson et al., 2010; Ell et al., 2011), it is important to examine the potential effectiveness of clinical pathways on treatment for Latino men with depression.

This study found no significant difference between Latino and non-Latino White men in the number of visits, days elapsed between visits and symptom reduction while participating in a depression clinical pathway. Similarly, there was no significant effect between groups and symptom reduction. When excluding the ethnic component, a significant effect was observed such that the scores of the first recorded PHQ-9 scores were higher than last recorded scores, which suggests efficacy of the clinical pathway.

When average number of visits were compared to national averages, there was a significant difference noted.

As suggested by previous research, clinical pathways used in an integrative behavioral health are beneficial in treating depression and due to the personal approach included, Latinos highly benefit from this approach as it motivates patients to attend their visits and may assist in medication adherence (Hansen & Cabassa, 2012). Further research should focus on exploring each component of clinical pathways and increase understanding of the efficacy of such on Latino men with depressive symptoms.

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