USING A CULTURALLY ADAPTED LEARNING TOOL WITH LATINOS DIAGNOSED WITH DEPRESSION

by

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Dedication

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Abstract

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Due to stigma, low mental health knowledge, and cultural beliefs a significant number of Latinos do not seek treatment for depression. Interventions and treatment methods that are culturally adapted and consider the patient's cultural perspective are minimal due to the lack of bilingual mental health providers. Using secondary data, this study reviewed a quantitative research study conducted at a community health center. The study conducted by Dr. Sanchez at a community health clinic, utilized a culturally adapted fotonovela as a depression education intervention (DEI) for Latinos diagnosed with depression. The purpose of this review was to analyze the effectiveness of the fotonovela at baseline and post intervention as measured by the Depression Knowledge Measure (DKM) and the Latino Stigma for Antidepressant Scale (LSAS). Analysis of the data revealed participants lacked knowledge and had uneasiness about taking antidepressants. Results concluded that psychoeducation and culturally adapted interventions/treatments could lead to Latinos improving their knowledge of depression and seeking treatment.

Keywords: Latinos, Depression, Treatment, Cultural awareness, Culturally adapted intervention

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Chapter 1

Literature Review

Depression

The World Health Organization (WHO) has reported that major depression is now one of the most widespread mental disorders in the world (WHO, 2017). Major Depressive Disorder (MDD) or clinical depression has a tremendous effect on a person's life. Almost every person either knows of someone who has it or has dealt with depression themselves. Depression disrupts behavior with friends and family, impedes ability to concentrate, and hinders capacity to handle daily activities (American Psychiatric Association, 2013; [National Institute of Mental Health, 2016]). Investigating this illness can help us understand how depression affects populations differently.

Depression is twice as common in adult females than in adult males (APA, 2013; NIMH, 2016). According to the NIMH, in 2015 there were 16.1 million adults age 18 and older in the United States who were diagnosed with at least one major depressive episode in the previous year (NIMH, 2016). Additionally, in 2016, depression was the number one cause of disability in the world and was a chief contributor to the total global problem of disease (WHO, 2017). Recognizing the impact depression has on a person and treating depression could also minimize other co-morbidities associated with this illness such as anxiety and diabetes (Sirey, Bruce, & Kales, 2010).

According to the DSM-V, major depressive disorder is defined as a period of two weeks or more where there is a depressed mood or loss of interest in pleasant activities and at least four

other symptoms that reflect a change in cognitive functioning (APA, 2013). Symptoms include but are not limited to feelings of hopelessness and/or helplessness, trouble sleeping, difficulty concentrating, increase/loss of appetite, thoughts of death or suicide, and/or suicide attempts (APA, 2013). People who are experiencing depression may not have every symptom. Symptoms may also differ depending on the stage and severity of the illness. People aged 15-44 years old with depression have almost $400 million disability days per year, significantly more than most other physical and mental conditions effecting the economy (Greenberg et al., 2015). Some patients with major depression are also diagnosed with comorbidities, physical/medical disorders, that include but are not limited to: diabetes, hypertension, cancer, stroke, anxiety, and arthritis (Rhee et al., 2015; Kang et al., 2015; NIMH, 2016). Consequently, depression has a significant impact on our economy, and social environments.

Depression and Latinos

Of the 16.1 million American adults with depression, 4.8% are of Latino descent (U.S. Census, 2016). Latinos are 17.6 % of the U.S. population, making them the largest ethnic minority group in the U.S. (U.S. Census, 2016). This group is less likely to receive treatment for depression than whites (Vega et al., 2010). Often, low-income Latino patients are not informed about treatment options and/or have little to no knowledge about depression, which contributes to disparities in care (Dwight-Johnson et al., 2010; Vega et al., 2010). The term health disparity refers to differences in rate and presence of disease and treatment for different populations and is closely related to social, economic, and/or environmental disadvantage (NIMH, 2016). Additionally, the cost of treatment is one of the top issues for impending quality of care for depression and other mental illnesses among Latinos (Vega et al., 2010; Cabassa et al., 2008; Uebelacker et al., 2011).

According to a cross-sectional analysis of 15,864 Latino men and women there was a high prevalence of major depression among this groups, 27%, and the odds of depression rose if there was cardiovascular disease (CVD) or other risk factors (Wassertheil-Smoller et al., 2014). Wassertheil-Smoller et al., (2014) discovered that those born in the US, as compared to foreign born, and continuing second or later generation, had even higher depression scores. Research has found Latino patients with a history of CVD, diabetes, and/or hypertension is associated with poorer prognosis due to Latinos somatic symptom of depression (Wassertheil-Smoller et al., 2014; Reavley & Jorm, 2014). Latinos are the largest minority group in the U.S and are less likely to recognize and receive treatment for depression due to various barriers; examination and education will be necessary to alleviate the social, economic, and environmental burdens generated by this disease.

Stigma

Stigma is a social label that identifies a person by that trait or illness and can isolate them from others (Castaldelli-Maia et al., 2011; Interian et al., 2010; Ferraz Alvez, & D'Elia 2011). Stigma is important to understanding why mental illness is denied or minimally addressed in Latino populations. Previous research indicates that there was a high level of stigma linked to having a mental illness, especially in non-English speaking immigrant communities, consequently depression often goes unnoticed or is minimized by many in this population (Kiropoulos, Griffiths, & Blashki, 2011). Latinos often refuse referrals to mental health providers fearing they will bring shame to their family, friends, community, and/or church (Uebelacker et al., 2011; Sirey, Bruce, & Kales, 2010). Also, due to stigmatization, some people will minimize symptoms or deny them to their primary care physician (PCP). Research has found that an estimated 50% of Latinos seek health care for depression from their general medical provider,

versus seeing a behavioral health provider (Vega et al., 2009; Uebelacker et al., 2011). Some Latino patients consult with their PCPs because they do not want to be stigmatized, reasoning to others they had a medical concern as opposed to a mental health issue (Vega et al., 2009; Uebelacker et al., 2011).

Different types of stigma affect Latinos and their response to mental illness. *Self-stigma* occurs when the person internalizes the shame of the diagnosis or label put on them (Owens, Thomas, & Rodolfa, 2013). Those who are dealing with self-stigma have feelings of weakness and an inability to deal with problems, confirming their idea of inadequacy or shame (Castadelli-Maia et al., 2011; Reavley, & Jorm 2014). Self-stigma leads patients to believe that depression is something they caused or that they are incapable of handling life's stressors. According to their research, Economou et al., (2016), reported that the clear "majority of respondents believe that people with depression could snap out of it if they wanted to (82.4%) and that depression is a sign of personal weakness (61.3%)" (Economou et al., 2016, pg. 246). This same study also found Latinos who embraced the stereotypical belief that depression is caused by personal fault were more likely to decide to deal with it by themselves (Economou et al., 2016). Because depression progresses, if not treated, stigma is a barrier that makes it more difficult for these patients to seek treatment therefore the depression increases and creates more stress, and loss for the patient.

Another type of stigma in the Latino community is the social stigma of depression. *Social stigma* refers to the distress a person might feel about what others will think/judge, in their social circle, for seeking mental health treatment (Owen, Thomas, & Rodolfa, 2013, Cook et al., 2013). Social stigma differs from public stigma in that public refers to the general population and social stigma refers to the social network of the person. Social stigma leads to isolation from family,

friends, churches, and any other social events/groups the person is a part of (Sirey, Bruce & Kales, 2010). Some research has suggested that self-stigma was a stronger forecaster for seeking treatment than social stigma (Gaudiano, & Miller, 2012). The research study from Gaudiano & Miller, 2012 also found that self and public stigma are interdependent and social stigma increased self-stigma, which led to greater treatment barriers (Gaudiano & Miller, 2012). Addressing the self-stigma by educating the patient can be a starting point in destigmatizing depression. Informing the patient about depression and its symptoms and how it is a medical disease that affects many and talking to the patient about the repercussions of the disease if it goes untreated. Cultural beliefs can influence the patient's perception of stigma and men in minority populations generally reported higher perceptions of stigma as compared to women (Owen et al., 2013). Providers should also be aware that stigma is more prevalent in men due to machismo in the Latino community. Machismo implies Latino males need to be unemotional, self-reliant, and strong (Collado, Lim, & MacPhereson, 2016). Therefore, education will be necessary to increasing the initiative to seek help and may ease the stigma of depression for Latino men.

Stigma and Antidepressants

Most Latinos are hesitant about using antidepressant medication because they believe they will become addicted or that medication will be harmful. In the Latino community, there are also fears about taking pills in general and there is a higher stigmatization connected to taking psychotropic medications (Gabriel & Violato, 2012; Gaudiano & Miller, 2012; Castadelli-Maiai et.al., 2011). Conflict about receiving antidepressants or psychotherapy is often established upon the beliefs the patient assigns to mental health treatment. Gabriel & Violato (2012) conducted research utilizing a multiple-choice question instrument that tested the knowledge of depression

and its treatments on 63 patients suffering from depression. Their results indicated that patients who have poor knowledge about and a negative attitude toward antidepressants selected the answer of "Stop taking the medication" or "Ask friends about what to do" instead of consulting with their PCP (Gabriel & Violato, 2012). Due to their lack of knowledge, many participants were troubled that if they had to take psychiatric medication they would be considered severely depressed and made them apprehensive in initiating treatment (Vargas et al., 2015, Ferraz Alvez, & D'Elia, 2011).

Additionally, research has found that adherence to antidepressants was declining when depressed patients assumed the damage from the antidepressant surpassed the need for the medication in a primary care sample (Gaudiano & Miller, 2012). If patients feared the antidepressant would make them gain weight, become addicting, or alter their thought process, they preferred not to take it at all. Many of the works referenced in this document have similar themes-for most Latinos, antidepressants are a last resort, not an option at all, or the antidepressants may have increased their depression (Gabriel & Violato, 2012; Interian et al., 2011; Castadelli-Maiai et.al., 2011; Vargas et al., 2015). This is especially true for non-English speaking and foreign-born Latinos. Further, if antidepressants were needed, patients would discontinue use if they experienced side effects such as sexual dysfunction, dizziness, and/or weight gain, or unsettled moods without improvement (Vargas et.al., 2015). Latinos in the U.S. have been less likely to be interested in pharmacotherapy access, starting medication, pill-taking or medication compliance, and were more likely to terminate use within the first 30 days of treatment (Vargas et.al., 2015). Stigmas with pill taking, especially with antidepressants, are deep rooted. Education could be an introduction to destigmatize antidepressants, but there might be reluctance due to the entrenched ideas and beliefs of psychotropic medications.

Cultural Awareness

Cultural awareness for medical providers is a set of skills that include the ability to understand the dynamic interaction of how culture shapes the patient's views, behaviors, and knowledge of mental illness, and how a person internalizes the diagnosis, and understands the treatment options (Kohn-Wood & Hooper, 2014). For example, patients may not request to review psychosocial problems with their PCP because they prefer to ''maintain face'' with them. Maintaining face is important for Latino patients, especially males; they do not want to be labeled as "loquito" (crazy) or vulnerable (Vargas et al., 2015). Understanding the patient's cultural perspective may lead to a valuable discussion of what mental health treatment means for the patient's sense of self and how their treatment decisions may be influenced by stigma, and other barriers (Malpass et al., 2009). PCPs should offer information about how treatment works (roles, treatment options, psychoeducation) in the initial consultation and in the regular follow-up during subsequent weeks. This will have a greater influence on the decisions the patient makes for their treatment process and on treatment adherence (Reavley, & Jorm, 2014).

Culturally aware providers should understand that Latino patients seek to develop and have a trusting relationship with their providers before they will self-disclose. Since there is a lack of bicultural and bilingual, Spanish speaking, mental health providers in the U.S., general medical providers are filling this service (Dwight-Johnson et al., 2010; Vega et al., 2010). Latino patients may turn away from PCPs due to distrust and/or not understanding what their role is as a patient (Sanchez et al., 2016; Uebelacker et al., 2011). Some Latinos already feel discriminated against by the health care system. Due to the lack of understanding that depression is a treatable chronic condition, there has been a denial of treatment by Latino patients, resulting in recurrent cycles and suffering of more severe bouts of depression (Sanchez et al., 2016; Vega et al., 2010).

A meta-analysis by Collado, Lim, & MacPherson (2016) found that ethnic minorities in the U.S. benefited from culturally-adapted psychotherapy compared to generalized psychotherapy practices (Collado, Lim, & MacPherson, 2016). Being aware of culturally adapted therapy and understanding the patient's knowledge of mental health is fundamental in the relationship with Latino patients. Providers should be culturally aware of the experiences of Latino patients and of any biases, misconceptions or generalizations they might bring to the situation (Ayalon, Aredin & Alvidrez, 2005; Nicolaidis et al., 2011). One study about women and depression treatment found Latina patients did not have a preference about their provider's race or ethnicity but wanted the provider to understand their culture (Nicolaidis et al., 2011). For most Latino patients, the relationship with their providers is friendly and providers should be patient-centered as opposed to physician-centered.

Religion is imbedded in the Latino culture and due to those ideas, some Latinos may have inaccurate beliefs about the cause of depression. Lacking knowledge of medical depression, some Latinos may reason that depression is caused by factors such as psychosocial stressors, being emotionally weak/lazy, losing self-control or having "nervios" (nerves), and difficulties resulting from supernatural and/or demonic experiences (Gabriel & Violato, 2009; Khon-Wood, & Hooper, 2014; Jimenez et al., 2012). Due to these beliefs and lack of knowledge, they will not seek help from a medical provider but instead turn to religious leadership, or family and friends for comfort or treatment (Jimenez et al., 2012).

According to a study of Latino geriatric patients diagnosed with a mental illness, most patients believed that their mental illness was caused by grief, separation from loved ones, or because they have relocated to a different place (Gaudiano & Miller, 2012). These patients rationalized their depression and did not understand that depression can be caused by biological

factors (Jimenez et al., 2012). In a recent study by Vargas et al., (2015) Latino patients reported there were different types and levels of depression, some temporary, others intense/severe, and some that can never be cured (Vargas et al., 2015). Limited understanding about the cause of depression and its biological characteristics is common in Latinos and other underserved racial/ethnic patients with depression (Gabriel & Violato, 2009; Vargas et al., 2015). Research indicated that Latinos only sought treatment after having tremendous anguish (Vargas et al., 2015). Therefore, psychoeducation is important for most Latino patients along with psychotherapy, and/or pharmacological treatment to maximize understanding of depression and patient adherence to treatment.

Education

Education for patients with chronic disease has improved patient engagement and enhanced health outcomes (Sanchez et al., 2016). While there is limited research on how education affects mental illness, education is something that should be considered as an adjunct to treatment for Latinos (Sanchez et al., 2016; Lagomasino et al., 2005; Uebelacker et al., 2012). Depression symptoms in Latino patients can be manifested as somatic symptoms, more so than White patients; many people do not recognize they are depressed, and instead may think they are just feeling sad and having unexplained stomach/headaches (Vega, Rodriguez & Ang, 2010). Education about depression and its symptomatology can assist in identification of symptoms, initiating communication, finding coping skills, and can help reduce the barriers to treatment (Sanchez et al., 2016; Lagomasino et al., 2005; Uebelacker et al., 2012). However, culturally adapted, evidence-based education interventions are lacking for depression for Latino patients, especially for non-English speaking immigrants (Owen, Thomas, & Rodolfa, 2013).

Education interventions that addressed barriers to depression treatment for Latino patients included adapting material for literacy, cultural content, social connection, and engagement (Sanchez et al., 2016; Uebelacker et al., 2012). Other methods included meeting the need for interpreters, bilingual providers, providing transportation, culturally modified psychotherapy treatments, and educating providers of cultural perspective (Sanchez et al., 2016; Lagomasino et al., 2005; Uebelacker et al., 2012). Offering Latino patients learning materials, comparable to the fotonovela that are literacy-level and dialectically appropriate and that consider gender roles and norms of Latino culture, have educated and minimized stigma for some Latino patients (Sanchez et al., 2016).

Fotonovela

Fotonovelas are comic book style pamphlets that tell a vivid story using photographs and speech bubbles. They represent a strong health education tool for low-literacy and ethnic minority audiences (Unger et al., 2013). Low health literacy problems have led to higher levels of chronic disease, elevated health costs, and low levels of preventative care (Sanchez et al., 2016; Cabassa et al., 2015). These problems are present within all racial and ethnic groups, but they are particularly prevalent among Latinos because of language difficulties, low socioeconomic status intensity, and lack of health and psychoeducation. Fotonovelas have proven successful in delivering health education by capturing Latino patients' interest (Sanchez et al., 2016; Cabassa et al., 2015; Unger et al., 2013).

The fotonovela is a method to encourage communication, advocate the acceptance and change the perception of depression and its barriers to valuable treatment (Sanchez et al, 2016). The fotonovela was a technique used to assist patients in understanding depression, and allowed them to feel comfortable about asking questions, and talk about any worries they might have

about depression and treatment options (Sanchez et al., 2016; Cabassa et al., 2015; Unger et al., 2013). The fotonovela uses Latino actors in images, who are portrayed as patients in the reading materials. Since fotonovelas are small, light booklets and easily read there can be a great connection, especially if the patient decided to pass them along to their social networks (Cabassa et al., 2015; Unger et al., 2013).

Research Question

The current study seeks to discover if utilizing a culturally adapted fotonovela as a means of mental health education improves a patient's knowledge of depression, its symptoms, and reduces stigma of antidepressants as measured by changes in the DKM and LSAS.

1. Participants will demonstrate an increase in knowledge of depression symptoms as measured by the Depression Knowledge Measure.

2. Participants' stigma will remain unchanged pre-and post-testing as measured by the Latino Scale for Antidepressant Stigma, LSAS.

Chapter 2

Methods

Design of Depression Screening and Education Options (DESEO) Project

The secondary data for this study were collected as part of the Depression Screening and Education: Options to Reduce Barriers to Treatment (DESEO) study led by Dr. Katherine Sanchez and her team. The DESEO study implemented a universal screening for depression (PHQ-9) and tested a Depression Education Intervention (DEI) for Latino patients diagnosed with depression. The goal of the PHQ-9 (see Appendix C) screening instrument was to enhance detection, diagnosis, and treatment of depression at a community health center whose patient

population is primarily Latino (Sanchez et al., 2016). The DEI was intended to improve disease literacy and dispel myths about depression and its treatment (Sanchez et al., 2016).

Setting and Participants

The North Texas Area Community Health Center (NTACHC) is an integrated medical clinic that provides services to Medicaid, Medicare, and uninsured patients. NTACHC is a federally funded 501(c)(3) not for profit organization (NTACHC, n.d.). NTACHC is the only Federally Qualified Health Center in Tarrant County (NTACHC, n.d.). Most of the patients are Latinos of lower socioeconomic status, are underinsured or uninsured, and do not speak English. The center's mission is "to provide a community medical home through accessible, compassionate, and quality health care services" (NTACHC, n.d., para. 3). The center provides a full range of services, from family-oriented primary and preventive services to family planning, prenatal care, health education, mental health services, and disease prevention services (NTACHC, n.d.).

The enrollment for the DESEO study was 318 participants over a 24-month period. All adult primary care patients were invited to participate in the screening for depression (Sanchez et al., 2016). The Latino patients who screened positive for depression were asked to participate in the study by the clinic's mental health provider. Persons who were not Latino did not qualify for this study because the intervention was culturally and linguistically tailored for the Latino population (Sanchez et al., 2016). Participants were also asked their language preference (Spanish, English or bilingual). The study protocol was reviewed and approved by the Institutional Review Board of the University of Texas at Arlington. All participants were provided a written informed consent to participate (Sanchez et al., 2016).

Depression Education Intervention

Patients who were documented as depressed by the PHQ-9 were referred to the mental health provider, who also served as the Depression Educator, for enrollment in the DEI where the fotonovela was then introduced (Sanchez et al., 2016). Patients who were previously diagnosed and treated for depression were disqualified. Patients with other mood disorders or were on antidepressants were also excluded (Sanchez et al., 2016). The Depression Educator confirmed the diagnosis through a diagnostic interview, if the PCP had not already done so (Sanchez et al., 2016). The Depression Educator explained the study and informed the participant of the compensation for finishing the study measures. The initial visit established the baseline measurement, the participant was then enrolled into the study. Following the initial visit the fotonovela was presented within two weeks of recruitment (Sanchez et al., 2016).

For the DESEO project, the fotonovela called "Secret Feelings" or "Sentimientos Secretos," is a culturally adapted story about depression and symptomatology. "Secret Feelings" is about a woman, Sofia, who is suffering from depression. She is married with a teenage daughter and her family does not understand why she is so sad, distant, and tired. Sofia talks to her friends and they urge her to see her doctor and tell her provider exactly what is happening to her. She decides to make an appointment and she is diagnosed with depression.

Since the clinic portrayed in the fotonovela is an integrated clinic, she also has her first visit with the therapist. Sofia now understands what is happening, but when she speaks to her husband he asks and comments: "Isn't therapy and these pills for crazy people?" and "I also do not want you speaking to strangers about our personal life." Sofia is disappointed her husband is unsupportive, but she continues with her therapy, taking her antidepressants, and beginning to

feel like herself again. The fotonovela concludes with her talking to her friends and remembering how sad she used to feel and how much she has improved (Baron, 2015).

The Depression Educator explained there would be a one-month follow-up phone call, after the DEI. Optimistically, at this point in the process, the Depression Educator would have built a relationship, connected, and asked the patient to participate (Sanchez et al., 2016). Once the patient accepted or declined, they were guided through the informed consent process (Sanchez et al., 2016). If the patient declined, they received care as usual for their depression by the clinic provider(s) (Sanchez et al., 2016).

Once the patient agreed to be in the study, the Depression Educator documented the patient's PHQ-9 score and administered the Depression Knowledge Measure (DKM), (see Appendix D), and Latino Scale for Antidepressant Stigma (LSAS), (see Appendix B), to establish as baseline (Sanchez et al., 2016). The Depression Educator then scheduled the patient to come back for their DEI within two weeks of the first session (Sanchez et al., 2016). It was recommended to the patient to bring family and/or friends to the session (Sanchez et al., 2016).

Measures

Depression Knowledge Measure

The Depression Knowledge Measure (DKM), (see Appendix C), calculates a person's identification of symptoms and treatment comprehension. The DKM has two sections, the first is symptoms identification and the second is true or false statements about treatment knowledge (Sanchez et al., 2016). The symptom identification contains a list of 10 symptoms: 5 are from the DSM-V for depression and the other 5 are non-depression symptoms. The list includes: hearing voices, sleeping too little, eating too much, being full of energy, feeling guilty, feeling agitated, being violent, loss of interest, hallucinating, and feeling confident. The treatment knowledge

section presents seven statements about treatment, the possible answers are: true, false, or don't know. These statements are from Griffiths' (2004) study on depression literacy and cognitive-behavioral therapy interventions and were modified to use with Hispanic/Latino populations (Sanchez et al., 2016). The calculations of the DKM are for the symptoms, for every question they get correct, they earn a point and in the true-false statements, they also earn a point for every correct answer. The following are examples of the questions asked: People with depression should stop taking antidepressants as soon as they feel better. Possible answers are true, false or don't know. The sum of the 17 items are scored with a minimum of 0 and maximum score of 17; score of 17 suggests that the participant has recollected the information and answered correctly; score of 0 suggests the participant did not recall the correct answers. The DKM is in both English and Spanish.

Latino Scale for Antidepressant Stigma (LSAS)

The LSAS is a reliable assessment tool that measures stigma-related assertions pertaining to the use of antidepressants. The LSAS is a 7-item measure and indicates whether participants agree with the statements using a 3-point scale ranging from a 0-2. A sample statement reads: People who take prescription medicine for depression have a difficult time solving their problems on their own. The LSAS is in both English and Spanish. The respondent can reply with 0=no one thinks that way; 1= some people think that way; 2=everyone thinks that way or 7=don't know or refuse to answer. The total score is the sum of the 7 items which varies from 0-14, 0 meaning they have answered to having less stigma and 14 more stigmas (Sanchez et al., 2016).

Patient Health Questionnaire (PHQ-9)

The PHQ-9 is a valid and reliable assessment tool and is shorter than other depression rating scales (Arroll et al., 2010; Williams, 2014; Moriarty et al., 2015). The PHQ-9 is self-administered or administered by a clinician or primary care practitioner. The PHQ-9 scores each of the nine diagnostic criteria for major depression in the DSM-V, in a Likert scale, 0 (not at all) to 3 (nearly every day) (Williams, 2014; Arroll et al., 2010; Moriarty et al., 2015; Beard et al., 2016). The PHQ-9 has nine questions with a maximum score of 27. The threshold score of 10 or higher is considered to indicate a mild major depression, 15 or higher moderate major depression, and 20 or higher severe major depression (Arroll et al., 2010; Moriarty et al., 2015). The PHQ-9 is effortlessly scored and interpreted, and is publicly available (Williams, 2014; Arroll et al., 2010; Moriarty et al., 2015; Beard, 2016). The validity of the inquiry form has been evaluated by both an independent controlled mental health professional and in the primary care site (Arroll et al., 2010). The PHQ-9 has been empirically reported to be appropriate for patients with a language barrier (Arroll et al., 2010; Moriarty et al., 2015; Beard et al. 2016).

Data Analysis

A one-group pre- post- test analysis (paired sample t-test) was used to assess knowledge of depression, the effect of the education intervention (fotonovela), and LSAS before and immediately after the intervention (Sanchez et al., 2016). Using a paired sample t-test is common in measuring a change over time, in this case, two points in time with one group (Rubin, 2007). This t-test is for ruling out sampling error only, and does not consider other explanations, such as maturation, measurement bias, and so forth (Rubin, 2007).

Chapter 3

Results

The final sample consisted of self-identified as Latino primary-care patients ($N = 318$). The mean age was 38.9 ($SD = 9.968$) and 296 were female (93.1%) and 22 males (6.9%). All participants self-identified as White-Hispanic and 301 (94.7%) were Spanish speaking and 16 (5.0%) were English speaking. Marital status of participants was 227 (71.4%) married/cohabitating, 36 (11.3%) never married, 8 (2.5%) widowed, 27 (8.5%) divorced, and 20 (6.3%) identified as other (see Table 1). The education level of the participants was 114 (35.8%) 8th grade or less, 84 (26.4%) some high school, 70 (22.0%) completed high school or GED, 8 (2.5%) had vocational or trade schooling, 28 (8.8%) had some college, and 10 (3.1%) earned a college degree, (see Table 1). Depression Knowledge Measure (DKM) scores at T2 ($M = 15.74$, $SD = 1.661$) were significantly higher than those at T1 $M = 10.73$, $SD = 2.168$ $t = 37.499$, $df = 317$, $p < .001$. Comparably, LSAS scores at T2 ($M = 6.64$, $SD = 3.490$) were also significantly higher than at T1 $M = 6.06$, $SD = 3.465$, $t = 2.924$, $df = 317$, $p = .004$, (see Table 2).

Table 1. Self-reported demographics (N= 318)

Participant Characteristics	Latino (N =318)
Gender	93.1
Women, %	6.9
Men, %	
Education,	
8th grade or less, %	35.8
Some high school, %	26.4
High school or GED	22.0
Vocational or trade school, %	2.5
Some college, %	8.8
College degree, %	3.1

Marital status	
Married/cohabitating, %	71.4
Never married, %	11.3
Widowed, %	2.5
Divorced, %	8.5
Other, %	6.3
Spanish speaking	
Yes, %	94.7
No, %	5.0
Missing, %	.3%
Age, years, mean (SD)	38.9 (9.68)

Hypothesis 1: My hypothesis was participants will demonstrate increased knowledge of depression symptoms as measured by the DKM. This was consistent with the results and therefore the null hypothesis is rejected, (t= 37.499, df = 317, p < .001.) *Hypothesis 2: Deep-rooted stigmas will remain the same pre-and post-testing as measured by the Latino Scale for Antidepressant Stigma.* As demonstrated from the results, the second hypothesis is rejected, for scores were significantly higher at T2 (M = 6.64, SD = 3.490) than at T1 (M = 6.06, SD = 3.465), (see Table 2).

Table 2. Self-reported measures (N = 318)

Measures	**Baseline**	**2nd Session**
Depression Knowledge Measure, (SD)	10.73 (2.16)	15.74 (1.66)
Latino Scale for Antidepressant Stigma, (SD)	6.06 (3.46)	6.64 (3.49)

Chapter 4

Discussion

The results from this study established the usefulness of "Secret Feelings," a fotonovela for depression education among low-literacy Latino patients. The results for one of the measures,

LSAS, was surprising. The fotonovela appeared to have captivated the participants, and increased their knowledge of depression and its symptoms as demonstrated by the DKM measure. On the other hand, LSAS scores also increased, suggesting the fotonovela deepened the participants' stigma towards antidepressants.

In retrospect, we must consider if the LSAS was an appropriate measuring tool. A study by Interian et al., (2010), found that the LSAS "demonstrated a significant association only with antidepressant undulation showed the measure is specifically assessing its intended onset of stigma associated with antidepressant usage" (Interian et al., 2010, p. 377). Another reason the LSAS might not have been appropriate was that it asked participants to answer the statements about what others think, which may have confused some of the participants. Thus, the use of another measurement tool could have changed the results and demonstrated a decrease of stigma for antidepressants. The results for the LSAS demonstrated an increase in the overall score from T1 to T2 significantly, T1 (*M = 6.06*) and T2 (*M = 6.64),* but the difference of the mean from T1 to T2 was only .58 points on a 1-14 scale. It is possible that participants may not have been comfortable with the way the questions were asked, and may have answered using their own opinions.

The results for the LSAS were inconsistent with past research that has explored the use of the fotonovela to decrease antidepressant stigma. Unger, Cabassa, Molina, Contreras & Baron, 2012, conducted study at a community adult school with Latinos and compared the fotonovela to a text pamphlet and their results indicate the fotonovela decreased the scores on the LSAS (Unger, Cabassa, Molina, Contreras & Baron, 2012). In another study, the fotonovela was effective in educating participants and minimizing stigma towards antidepressants (Unger, Cabassa, Molina, Contreras & Baron, 2012). Finally, according to Interian et al., (2010), the

LSAS was created purposely for Latinos based on qualitative work and the data analyzed for this study was quantitative. Thus, this measurement tool might not have been appropriate for this quantitative study.

The results of the DKM were as expected by the evaluator. The fotonovela is a learning tool that allowed patients to relate to the characters in the story and internalize the information (Cabassa et al., 2015). The fotonovela was effective as it increased the knowledge of depression and its symptoms as demonstrated by the great increase of scores in the DKM. These results are promising because they suggest a culturally adapted education intervention is effective in delivering accurate material and that participants did retain the information they learned from T1 to T2.

The fotonovela conveys the symptoms of depression through the characters' facial expressions, statements made to their friends and family, and dialogue. The fotonovela also has a question and answer section in which information about symptoms of depression is summarized and repeated. This could explain why the DKM scores increased so much, as the DKM is only about the knowledge gained and facts, and the information was repeated throughout the fotonovela and mentioned again at the question and answer portion of the fotonovela.

On the other hand, the way the Depression Educator presented the DKM could have influenced the answers and consequently increased the scores. It is possible that the Depression Educator unknowingly influenced the answers with nonverbal cues and, therefore, increased the scores of the DKM. Future studies should conduct a qualitative study to determine how patients relate to the fotonovela and express their thoughts on antidepressants and stigma, as well as attitudes and behaviors of depression.

A future qualitative study could help explore the misunderstandings Latino patients have regarding using antidepressants. A qualitative study would allow patients to express, in their own words, the thoughts, ideas, and preferences/feelings towards treatment. Overall, this review has found stigma is intense in this community. The stigma is so profound, even when presented with scientific facts, the stigma of antidepressants continued to be present as demonstrated by the LSAS. Also, a qualitative study can explore the challenges Latino patients deal with when taking antidepressants and how they interact with their providers and explore why treatment retention is low for this patient population.

Additionally, a qualitative study could also help explain why Latino patients are scared/reluctant to use antidepressants. Qualitative studies can assist in examining more complex data and uncover the appropriate factors to measure when researching stigma and antidepressants. Further, it may explain the links that initiate this fear and assist in designing measurement tools, treatment plans, and educational tools for Latino patients dealing with depression. Finally, a qualitative study may seek to reduce bias for providers and can help in engaging the patient to initiate and complete treatment.

Limitations

The accomplishments of this study were realized in the context of its methodological limitations. First, the author used secondary data. By the author not being present at intervention, the Depression Educator could have asked leading questions post intervention or demonstrated nonverbal communication that could have affected the scores. Second, participants in this study were recruited from one community health center; consequently, the results might not be generalizable. Additionally, participants volunteered while at PCP's office, and could have been

open to speaking about depression and stigma, not common for this population, therefore, creating a bias for patients open to treatment, and open to communicating about their depression.

Third, only 6.9% males participated in the study, limiting the research on the Latino male population and creating a gender bias. Ninety-three percent of the participants were women, therefore, the results disproportionately captured men's understanding on depression. Past research has found men less likely seek treatment, are less aware of mental illness, and tend to have less mental health education (Economou et al., 2016). Lastly, clients were assessed only at pre-and immediately post-intervention. There is no record at the time this review was written if the DKM or LSAS scores changed over time. This could be a framework for a future study to perform a one month follow up and determine any changes in DKM and the LSAS over time.

Implications for social work

To decrease the number of people affected by depression, education will be crucial for the Latino community. Using culturally adapted tools, like the fotonovela, will assist in the process. Working to minimize the stigma of depression and antidepressants, which will be an uphill battle, by implementing early intervention, and applying different styles of teaching will be necessary, especially since some of these stigmas are deep-rooted and reinforced by social networks, churches, and family.

Literature reiterates that Latinos tend to go to their PCPs for mental health services (Vega et al., 2009; Uebelacker et al., 2011; Alegria et al., 2008). PCPs must also be part of the education process, not just by giving patients pamphlets, but by having a conversation and enlightening patients about depression and its symptoms, and informing them of treatment options. As Latino patients tend to seek help from and entrust in their PCPs for mental health issues, they are the first point of contact and education for these patients should begin at this

point. This could be the bridge to introducing a mental health provider. Working in partnership with the mental health provider would allow the patient to understand the process of treatment with psychotherapy and/or antidepressants, depending on the severity of depression.

A study conducted in a hospital setting found that patients who were depressed tended to prefer psychotherapy over medications for managing their depression (Gaudiano & Miller, 2012). If their belief of treatment is utilized, with the help of the PCP, and mental health provider, they will most likely adhere to treatment and improve their depression, and could initiate a change of stigma towards mental health treatment. Thus, a collaborative treatment model will be necessary with Latino patients diagnosed with depression. In this medical model, a mental health provider can begin building rapport with the patient at the time of diagnosis. The mental health provider, PCP, and patient can work together to come up with the best treatment plan for the patient. If antidepressants are necessary, the collaboration between therapist and PCP can guide the process along with the patient regarding their treatment options.

This study established that using the culturally adapted intervention "Secret Feelings" did improve knowledge of depression. As this reviewer discovered, the fotonovela was effective in educating this group of patients about depression and its symptoms. Future research should approach this population with mixed-methods research and should echo methods that represent the voices of the patients and practitioners equally. As research has found, there is a shortage of bilingual/bicultural providers (Jimenez, Bartles, Cardenas, Dhaliwal & Alegria, 2012; Dwight-Johnson et al., 2010; Vega et al., 2010). When working with Latino patients, social workers need to be culturally aware by educating themselves of the norms and expectations of Latino patients, by self-assessing and advocating for their patient.

Culturally appropriate tools will be essential to engaging in and completing treatment for Latino patients. Stigma of antidepressants is profound and providing support to these patients will be necessary for recovery and decreasing depression for Latinos. Learning about the hurdles practitioners deal with, and how they overcome them, while meeting the policies and regulations put upon them working in a collaborative clinic is beneficial. Finally, balancing the medical model with a social work best practice model is essential to empower a framework that is more Latino patient oriented. Creating a holistic treatment model will be the tool needed to begin the destigmatizing of depression and antidepressants, allowing patients to complete treatment, and restore their health.

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Appendix A

Latino scale for antidepressant stigma (LSAS)

Instructions: Please tell me how each statement describes how most people think.
Instrucciones: Por favor dígame como usted cree que la mayoría de la gente piensa.

0–No one thinks that way / *Nadie piensa de es manera* 1–Some people think that way / *Algunos piensan de esa manera* 2-Everyone thinks that way / *Todos piensan de esa manera* 7-Don't Know/Refused / *No sé / rehusó*	
1. People who take prescription medicine for depression have a difficult time solving their problems on their own. / *Personas quienes toman medicinas recetadas para la depresión tienen dificultad resolviendo sus problemas por si mismos.*	0 1 2 7
2. Prescription medicines for depression are for people who are not strong. / *Medicinas recetadas para la depresión son para personas quienes no son fuertes.*	0 1 2 7
3. Once someone is prescribed medicine for depression, it means his or her problems are too severe for a solution. / *Cuando alguien es recetado medicamentos para la depresión, esto significa que los problemas de esa persona son tan difíciles que no se pueden resolver.*	0 1 2 7
4. Prescribed medicine for depression is usually given only to people with severe mental disorders. / *Usualmente, medicamentos recetados para la depresión son para personas con desordenes mentales graves o severos.*	0 1 2 7
5. People who take prescribed medicines for depression are affected as if they were "on drugs". / *Personas quienes toman medicinas recetadas para la depresión son afectadas como si estuvieran usando drogas.*	0 1 2 7
6. Once someone takes prescribed medicine for depression, they will have to depend on that medicine to function. / *Ya que alguien toma medicinas para la depresión, él o ella dependerán de la medicina para poder funcionar.*	0 1 2 7
7. Taking prescription medicine for depression will affect a person's ability to function, like being able to drive or take care of children. / *Tomar medicamentos para la depresión afecta la habilidad de una persona para funcionar, como la capacidad para conducir un automóvil o cuidar a niños.*	0 1 2 7
Notes. Score by taking the sum of items 1 – 7, without scoring values of 7. Total score ranges from 0 – 14.	

Appendix B
PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME:
DATE:

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

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

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

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

Appendix C

Depression Knowledge Measure

Which of the following are symptoms of depression? (Check all that apply) *¿Cuáles de los siguientes son síntomas de la depresión? (Marque todo lo que corresponda)*	
☐ Hearing voices/*Escuchar voces*	☐ Feeling agitated/*Sentirse agitado*
☐ Sleeping too little/*Dormir muy poco*	☐ Being violent/*Ser violento*
☐ Eating too much/*Comer demasiado*	☐ Loss of interest/*Perdida de interes*
☐ Being full of energy/*Estar llno de energia*	☐ Having hallucinations/*Tener alucinaciones*
☐ Feeling guilty/*Sentimientos de culpa*	☐ Feeling condident/*Sentirse seguro*

Medications can help someone with depression. *Los medicamentos pueden ayudar a alguien con depresión.*	☐ True/*Cierto*	☐ False/*Falso*	☐ Don't know/*No lo se*
Depression is a medical condition. *La depresión es una enfermedad médica.*	☐ True/*Cierto*	☐ False/*Falso*	☐ Don't know/*No lo se*
People with depression get better by themselves without professional help. *Las personas con depresión mejoran por si mismos sin ayuda profesional.*	☐ True/*Cierto*	☐ False/*Falso*	☐ Don't know/*No lo se*
People with depression should shop taking antidepressants as soon as they feel better. *Las personas con depresión deben dejar de tomar antidepresivos en cuanto se sientan mejor.*	☐ True/*Cierto*	☐ False/*Falso*	☐ Don't know/*No lo se*
Talking to a counselor can help someone with depression. *Hablar con un consejero puede ayudar a alguien con depresión.*	☐ True/*Cierto*	☐ False/*Falso*	☐ Don't know/*No lo se*
Antidepressants are addictive. *Los antidepresivos son adictivos.*	☐ True/*Cierto*	☐ False/*Falso*	☐ Don't know/*No lo se*
Antidepressant medications work right away. *Los medicamentos antidepresivos trabajan de inmediato.*	☐ True/*Cierto*	☐ False/*Falso*	☐ Don't know/*No lo se*