ABSTRACT

LATINO OLDER ADULTS AND ALCOHOL USE: A DESCRIPTIVE ANALYSIS

By

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A secondary analysis was conducted with data from the Substance Abuse and Mental Health Services Administration's 2012 National Survey on Drug Use and Health. The model of behavioral health for vulnerable populations was utilized to select key variables in order to examine the alcohol use, health, mental health and alcohol use treatment of older adult Latinos. Data from 395 Latinos over the age of 50 who reported drinking alcohol in their lifetime were used. The results showed that Latino men over the age of 50 tend to use alcohol above the National Institute on Alcohol Abuse and Alcoholism (NIAA) low risk guidelines. Additionally, older adults who were in poverty, reported depression and anxiety over the past year, and reported alcohol dependence were more likely to seek mental health treatment instead of specialty alcohol treatment. The findings underscore the importance of social workers in mental health settings to not only assess older adults for depression and anxiety but also for alcohol use disorders.

LATINO OLDER ADULTS AND ALCOHOL USE: A DESCRIPTIVE ANALYSIS

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CHAPTER 1

INTRODUCTION

In the United States by 2050, the adult population aged 65 and older is expected to grow to an estimated 84 million (Ortman, Velkoff, & Hogan, 2014). The older adult population will also be more ethnically diverse. Moreover, according to Ortman et al. (2014), the Latino population 65 and older will experience a substantial growth from 3.1 million in 2012 to 15.4 million by 2050. As the older adult population increases, substance use disorders are also expected to grow by 2020 among the 50-59 age group (Han, Gfroerer, Colliver, & Penne, 2009). Although Latinos of all ages have a lower rate of alcohol use than the national average, Latino males over the age of 50 have higher rates of binge drinking (Substance Abuse and Mental Health Services Administration [SAMHSA], 2010).

<u>Background</u>

Alcohol misuse among older adults of all ethnicities creates health risks. In a study that analyzed Centers for Disease Control and Prevention (CDC) data on prescription use in the United States, more than half of older Americans over the age of 60 utilized prescription drugs (Gu, Dillion, & Burt, 2010). Prescription medication mixed with alcohol can pose several health risks such as damage to the liver, psychomotor slowness, hypotension, and gastrointestinal issues (Moore, Whiteman, & Ward, 2007). Many chronic illnesses can be worsened by alcohol consumption such as

breast cancer, diabetes, seizures, dementia, depression, insomnia, and hypertension. According to Moore et al. (2007), among older adults who have been chronic alcohol users, it may take a higher dose of prescription medicine to be effective. Moreover, these researchers found that for older adults who participate in heavy episodic drinking or binge drinking, drugs might be stronger and can be toxic. Having 12 or more drinks in 1 year was associated with higher rates of suicide, falls, and car accidents (Sorock, Chen, Gonzalgo, & Baker, 2006).

Psychological issues have also been related to risky alcohol use. In a study that analyzed binge drinking and psychological distress, it was found that higher levels of binge drinking were associated with higher levels of psychological distress (Bryant & Kim, 2013). Moreover, older adults who had moderate to severe levels of depression were more likely to be problematic drinkers, especially adult males in the young-old age category (Rodriguez, Schonfeld, King-Kallimanis, & Gum, 2010).

<u>Research Purpose</u>

The purpose of this cross-sectional study was to gain a better understanding of alcohol use among older Latinos over the age of 50. The study also examined the relationships among alcohol use and health, mental health, and mental health treatment. Core demographics of age, gender, marital status, language spoken, and rating of self-perceived health were also examined.

<u>Research Questions</u>

(1) What are the drinking patterns for older adult Latinos? (2) Do age and gender influence the drinking patterns of older adult Latinos? (3) How does alcohol use affect the self-perceived health status and chronic health illness of Latinos?

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(4) Is there a relationship between the drinking patterns of older adult Latinos and their mental health status? (5) What factors influence whether Latinos seek alcohol use and mental health treatment?

<div align="center">Definitions</div>

Alcohol use disorder: As described by the American Psychiatric Association (2013), this is a pattern of alcohol use that includes at least two of the criteria over a 12-month period: drinking large amounts of alcohol or using alcohol for longer periods of time than intended, the wish to reduce alcohol use but unable to do so, a majority of time spent trying to obtain and use alcohol, and strong cravings and urges to use alcohol. In addition, using alcohol causes social, personal, and occupational problems. Alcohol tolerance causes a person's usual amount of alcohol to be ineffective. As a result, a person will have to drink more. In addition, a person will also experience withdrawal symptoms. Severity is based on the number of criteria endorsed, ranging from mild to severe.

Binge drinking: Drinking five or more alcoholic drinks around the same time or occasion at least once in the last month (National Survey on Drug Use and Health [NSDUH], 2013).

Heavy drinking: Drinking five or more alcoholic drinks within a few hours on 5 or more days in the last month. All heavy drinkers are also binge drinkers (NSUDH, 2013).

Latinos: A person who is born in the United States of Mexican, Central American, or South American descent. A Latino is also a person born in Mexico, Central

America or South America and now lives in the United States. Individuals may also be referred to as Hispanic.

Older adult: In this research study, an adult is someone over the age of 50 (data limitations).

Maximum drinking limits: It is recommended that women and men over the age of 65 should not drink more than three drinks in a day or exceed seven drinks in a week (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2005).

Standard drink measures: A standard drink is a drink that has 14 grams of pure alcohol. It is equivalent to a 12-ounce beer; 5 ounces of wine; 8 to 9 ounces of malt liquor; and 1.5 ounces of hard liquor such as gin, rum, and vodka (NIAAA, 2005).

<div align="center">Social Work and Multicultural Relevance</div>

The National Association of Social Workers (NASW) states that alcohol, tobacco, and other drug treatment and prevention need to be tailored to adults according to their age, gender, ethnicity, culture, sexual orientation, programs, and religious views as well as other relevant factors (2009). In order to accomplish this, studies that examine the alcohol use of Latinos and older adults within that population need to be conducted to understand their drinking patterns, risk factors, and patterns in seeking substance treatment as well as mental health needs. These studies can help create effective prevention programs that are culturally relevant and age appropriate.

Substance use affects all races and ethnicities. However, among cultural minorities in the United States, there are disparities in substance use treatment. Latinos, when compared to non-Hispanic Whites, often have greater rates of not completing alcohol treatment and not seeking alcohol treatment. Moreover, Latinos and African

Americans, when compared to non-Hispanic Whites, were less likely to complete federally funded substance abuse treatment programs. When compared to non-Hispanic Whites, African Americans, Hispanics, and Native Americans were more likely to have greater levels of socioeconomic disadvantages (Saloner & Le Cook, 2013).

There are ethnic disparities in the social consequences related to alcohol use. In a study that explored the disparities between non-Hispanic Whites and Latinos regarding alcohol use, Hispanic women experienced higher rates of social consequences such as arguments and fights regarding their drinking. Although Latino men reported lower levels of heavy drinking, they still reported a greater level of legal and work related consequences than non-Hispanic White men (Witbrodt, Mulia, Zemore, & Kerr, 2014). African Americans and Latinos were more likely to report three or more dependence symptoms than non-Hispanic Whites (Witbrodt et al., 2014). The present study aimed to examine the drinking patterns of Latino adults over the age of 50 to gain a better understanding of the patterns between alcohol use and gender, age, and seeking substance abuse treatment and mental health services.

CHAPTER 2

LITERATURE REVIEW

<u>Behavioral Model for Vulnerable Populations</u>

This research used the Behavioral Model for Vulnerable Populations as a

theoretical framework to examine treatment utilization, alcohol use, mental health, and

health in Latino adults over the age of 50 (Aday, 1993). Vulnerable populations in the

United States are populations who have several health-related risk factors. Often, these

populations have limited access to care due to the inequities and discrimination they face

(Blacksher, 2002; Raphael, Stevens, & Pedersen, 2006). The Behavioral Model for

Vulnerable Populations utilizes a systems approach in order to integrate different factors

that are related to a person's decision to obtain care but also his or her community's

resources and barriers to access treatment. There are four factors that affect a

population's access to care: predisposing, enabling, need and factors that are related to

health services.

Predisposing factors are demographic factors of an individual including age,

gender, race, ethnicity, religion, and views and values towards health and diseases

(Anderson, 1995). Enabling factors help individuals either access services or are factors

that create barriers to access including resources available to individuals and their

families. These resources can be income and medical insurance as well as characteristics

of the community in which they live in such as rural versus urban (Anderson, 1995). The

need factor is not only the presence of an illness or health condition in an individual and self-perceived health status but also the individual's belief that the health condition requires treatment. Lastly, health service factors are the characteristics of the treatment services. There are certain variables that are specific to vulnerable populations. These are social status, self-perceived state of health, the resources in their community, living conditions, personal health practices and personal and family resources (Aday, 1993; Gelberg, Andersen, & Leake, 2000; Shi & Stevens, 2005).

<center>Latinos in the United States</center>

In a multicultural society, ethnicity is often a characteristic that is assigned. Some ethnic groups are distinguishable due by the color of their skin or their lack of fluency in the dominant spoken language (Room, 2005). Room (2005) argues that even immigrant groups who see themselves as different from each other may be aggregated into the same category by the society to which they migrate. In the United States, individuals from Mexico, Cuba, and Puerto Rico are identified as belonging to the Latino or Hispanic ethnic group (Room, 2005).

However, Latinos in the United States are not a homogeneous group. Several differences exist within the Latino ethnic groups. Guarnaccia et al. (2007) analyzed data from the National Latino and Asian American Study (NLAAS) and assessed the differences within Latinos. The authors focused on Latinos 18 years and older and broke down the Latinos into four subgroups: Mexican, Cuban, Puerto Rican, and other Latinos. Guarnaccia et al. determined that there were differences within the Latino subgroups including education level, income level, language, and age of migration. When comparing the level of education among the four Latino subgroups, Latinos of Mexican

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descent reported fewer years of education while Latinos of Cuban descent reported 16 years or more of education. On average, Latinos of Mexican descent reported lower household incomes compared to other Latino groups (Guarnaccia et al., 2007). On average, Puerto Rican Latinos were younger when they arrived in the United States than Latinos of Cuban descent. Cubans were more likely to have planned their move to the United States and expressed a higher desire to immigrate to the United States than Latinos of the other subgroups. Most of the Latinos felt satisfied with their economic situation; however, Cubans had higher satisfaction level.

Guarnaccia et al. (2007) also found that the Latino subgroups had varied reasons for migration to the United States. Mexican participants migrated for employment opportunities while Cubans and other Latino participants were motivated by political reasons. However, in a qualitative study, Lee et al. (2006) found that a majority of the Latino interviewees expressed a similar theme. They had all immigrated for a better life (Lee et al., 2006). Cubans were more likely to prefer to be interviewed in Spanish while Puerto Ricans preferred English. In fact, Puerto Ricans reported the least acculturation distress while Mexicans reported the highest levels of distress.

<u>Mental Health and Latinos</u>

Rivera et al.'s study (2008) illuminates differences among Latino subgroups regarding psychological distress, cultural conflict, and family cohesion with data gathered from NLAAS. There were 2,540 Latinos who were born in or had ancestors from Mexico, Puerto Rico, Cuba, and from Central and South America. Puerto Ricans reported higher levels of cultural conflict and psychological distress with lower levels of family cohesion. In addition, Puerto Ricans who reported an annual household income of

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less than $15,000 reported higher psychological distress than the other subgroups. Cubans who attained higher levels of education and those who had never been married reported lower levels of psychological distress. For Mexicans, higher levels of cultural conflict resulted in higher levels of psychological distress. Among Cubans, Mexicans, and other Latinos, females had higher levels of distress than their male counterparts. This may occur due to the conflicting gender roles valued by their Latino culture, which embraces more traditional roles (Rivera et al., 2008).

Similar to Rivera et al. (2008), Priest and Denton (2012) also utilized data from the NLAAS between 2002 and 2003 to examine the impact of family unity and family discord on anxiety disorders with responses from 2,544 Latinos. In general, stronger family unity decreased the likelihood of meeting the criteria for generalized anxiety disorder and panic disorder. Furthermore, greater family disharmony increased the likelihood of every anxiety disorder except panic disorder.

Similarly, Chavez-Korell, Benson-Florez, Rendon, and Farias (2014) examined the Latino value of *familismo*, which is a sense of a strong family connection and family orientation. The authors examined whether *familismo* among Latinos and other factors such as physical functioning, acculturation and ethnic identity predicted depressive symptoms among Latino older adults. The authors surveyed 98 Latino adults who were 65 years and older. The majority of the participants were not born in the United States and identified themselves as being of Mexican and Puerto Rican nativity. Chavez-Korell et al. found that participants who had lower levels of physical functioning reported higher levels of depressive symptoms. Moreover, on one hand, greater acculturation was a predictor of depressive symptoms among the older adult Latino participants. On the

other hand, the authors found that participants with positive feelings about their Latino ethnicity had fewer depressive symptoms. The authors found that *familismo* was negatively related to depressive symptoms (Chavez-Korell et al., 2014).

Dupree, Herrera, Tyson, Jang, and King-Kallimanis (2010) analyzed preferred mental health treatment and the beliefs regarding mental health problems among 119 Latinos ages 18 to 64 and 136 older Latinos between the ages of 65 and 101 in the state of Florida. The authors found that older adults preferred seeking mental health treatment from their family doctor, followed by a preference for just taking medication, handling their feelings on their own and seeking advice from family, rather than seeking help from mental health professionals. Additionally, the older adult participants reported their belief that mental health problems were only physical issues and that an individual's problems were private (Dupree et al., 2010). Although 84.3% of the younger participant group reported a preference for seeking help from their primary doctor, a majority (80.5%) also reported a preference for individual counseling, (79.7%) advice from family and (74.8%) mental health treatment from a psychologist. The findings suggested that the participants in the 18 to 64 group preferred seeking mental health from professionals than the Latino participants in the 65 and older group (Dupree et al., 2010).

Jang, Chiriboga, Herrera, Tyson, and Schonfeld (2011) also examined mental health beliefs among 297 Latinos over the age of 60. The authors found that the older the participants were the more likely to have negative attitudes toward mental health services. Further, more than half of the participants reported the belief that depression was a normal part of the aging process, 31% of participants believed that having depression was a sign of weakness and 62% of the participants reported the belief that

anti-depressant medications were addictive. Jang et al. also found that endorsing the beliefs that mental health treatment causes sad memories and that having depression would disappoint family members were predictors of negative views towards mental health services.

Ai, Appel, Huang, and Lee (2012) analyzed data from NLAAS to examine chronic health conditions and mental health utilization among 1,427 Latina women between the ages of 18 and 97 in four subgroups: Cuban, Mexican, Puerto Rican, and other Latin American. Ai et al. found that more Cuban American women reported excellent mental health when compared to Mexican and Puerto Rican women. For physical health, Puerto Rican women reported the highest rate of asthma and headaches. Mexican American women reported the highest rate of diabetes and back and neck pain. Cuban women reported the highest rates for hypertension and heart disease. Puerto Rican women reported the highest rates of depression, substance use, and greater use of mental health services.

Shobe, Dmochowski, and Coffman (2009) surveyed 99 Latinos 18 to 68 years of age who were recent immigrants and examined their need for physical and mental health services. They found that participants' social connections and economic hardships were associated with depression. Immigrants who lacked or had less social support in the United States reported higher levels of depression than those with more social support (Shobe et al., 2009). Additionally, Latino immigrants with more financial hardship also reported higher levels of depression. Furthermore, Mexican immigrants reported greater levels of depression than the other Latino immigrants surveyed (Shobe et al., 2009).

Alcohol Use Among Latinos

It has been found that Latinos have different drinking patterns than other ethnicities and these patterns also vary by the specific cultural group. The difference is that some Latino groups are more likely to binge drink than others (Bryant & Kim, 2013; Mulia, Ye, Greenfield & Zemore, 2009). In a cross-sectional study of a Medicare sample, Merrick et al. (2008) found that men and adults over the age of 65 often exceeded the monthly or daily drinking limits. The study found that non-Hispanic White men were more likely to exceed the monthly 30-drink limit than Latino men. However, among unhealthy drinkers, Latinos had higher rates of binge drinking (Merrick et al., 2008).

Moreover, several studies have analyzed the different drinking habits within Latino subgroups. Caetano, Ramisetty-Mikler, and Rodriguez (2008) analyzed data from the Hispanic Americans Baseline Alcohol Survey (HABLAS) that surveyed 5,224 Latinos over the age of 18. They found that among Latinos, Mexican American men had the highest rate of alcohol use, followed by Puerto Rican men, while Cuban men had the lowest rates (Caetano et al., 2008). The authors also found that Mexican American men ages 50 to 59 had a higher rate of alcohol abuse than other Latino subgroup in that age category. Moreover, men over the age of 50 were at greater risk for dependence. The authors also found that risk factors for Latinos included males drinking before the age of 15 (Caetano et al., 2008). However, in a review of the recent research and national surveys on ethnic disparities and alcohol, Chartier and Caetano (2010) found that it was Puerto Rican men who had the highest rates of binging among Latinos. Among Latina women, Puerto Rican women had the highest rate of alcohol use. In addition, an early

large national study found that once Latinos became dependent, they had higher rates of persistent alcohol dependency (Dawson et al., 2006). Latinos were also less likely to receive treatment once they had severe alcohol problems (Chartier & Caetano, 2010).

Caetano, Vaeth, Mills, and Rodriguez (2013) utilized data from the HABLAS 2006 survey to compare alcohol use and dependence among 1,307 Mexican Americans living in United States cities along the Mexican border and 1,288 Mexican Americans living in other urban cities. The authors found that females between the ages of 18 to 29 who lived in border cities had higher rates of alcohol dependence than women from non-border urban cities. In addition although there was no significant difference between border and non-border groups for alcohol dependence, border residing women reported greater alcohol tolerance. Women in both groups, who were not married or living with partners, not currently working, more educated, and had no religious preference were more likely to meet the diagnostic criterion for alcohol dependence. The authors also found that women who lived on the United States-Mexico border reported more legal issues related to drinking than women who lived in non-border urban areas (Caetano et al., 2013).

Men from border areas between the ages of 18 to 29, had a higher prevalence rate for alcohol abuse than men from non-border urban areas. Men over the age of 50 who lived in non-border urban areas reported higher rates of alcohol abuse (7.7%) than those who lived on the border (2.2%). Men who lived on the border were at greater risk for alcohol abuse at younger ages; however that risk was reduced at older ages (Caetano et al., 2013). Additionally, greater consumption of alcohol increased the likelihood of meeting the diagnostic threshold for alcohol abuse (Caetano et al., 2013). Alcohol

dependency for men was also linked to older age as a protective factor. Moreover,

religious affiliation was associated with higher alcohol abuse, but affiliation with the

Jewish religion served as a protective factor.

The reasons given by Latinos for the use of alcohol have also been studied. Lee

et al. (2006) conducted six focus groups with 36 Latinos who resided in the northeastern

United States to understand their alcohol use and acculturation. All the participants

reported heavy alcohol use; they were between the ages of 23 and 56 years old; and had

immigrated from Mexico, South America, Central American or the Caribbean. The

authors found that the participants engaged in heavy alcohol use because they felt lonely

and missed the social network they had in their country of origin (Lee et al., 2006).

Participants reported that they felt alienated in the United States by the change in culture

and daily routines of life and as a consequence felt sad, depressed, lonely and stressed. In

addition, they missed family, friends, and extended family who had served as support

sources. Women participants who were more acculturated stated they drank more in the

United States because they felt that they had more social freedom, such as no parental

control and fewer responsibilities. Men reported higher levels of alcohol consumption

than women, which is consistent with other findings from studies (Caetano et al., 2008;

Caetano et al., 2013; Chartier & Caetano, 2013). Additionally, participants reported that

in order for them to seek help their alcohol use had to cause severe behavioral reactions

such as public intoxication, domestic violence, and child abuse or neglect (Lee et al.,

2006).

Borges et al. (2011) analyzed surveys from both the United States and Mexico

between 2001 and 2003 to compare alcohol and illicit drug use among Mexican

immigrants in the United States, United States born Mexican Americans, returned

Mexican migrants in Mexico, and Mexicans living in Mexico with no migration history.

The authors found no empirical evidence that identified one group at a higher risk for

alcohol use disorders over another. However, when compared to non-migrant Mexicans,

immigrant Mexicans in the United States were more likely to use illicit drugs and had a

greater risk for substance use disorders. Interestingly, the authors also found that

immigrants who returned to Mexico were more likely to use alcohol rather than illicit

drugs. Borges et al. also found that Mexican Americans had a greater likelihood of illicit

drug use and substance use disorders. Mexican Americans were more likely to report

similar substance use patterns as their non-Latinos counterparts.

<center>Impact of Alcohol on Health</center>

The impact of alcohol use on health has also been examined. Assari (2014)

conducted a longitudinal study on the effects of anxiety, depression, and problematic

drinking on subjective health reports. Participants included 4,655 male adults from three

groups: 2,407 African Americans, 1,354 Latino Whites, and 894 non-Hispanic

Whites. The researcher found that among all three groups, problematic alcohol use was

associated with worse self-rated health (Assari, 2014). Williams, Bradley, Gupta, and

Harris (2012) examined the relationship between mortality rates of African American,

Latinos, and White non-Hispanic male veterans and their alcohol screening scores.

Surprisingly, the authors found that in all three ethnic groups, non-drinkers and those

who engaged in mild to moderate alcohol misuse had increased rates of death (Williams

et al., 2012). In addition, non-Hispanic Whites and Latinos with severe alcohol use

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scores were at a higher risk of death than those with low level drinking scores (Williams et al., 2012).

More alarmingly, Latinos also have higher rates of alcohol-related cirrhosis deaths than other ethnic groups (Chartier & Caetano, 2010; Chartier, Vaeth, & Caetano, 2013;Yoon, Yi, & Thompson, 2011). Yoon et al. (2011) analyzed the United States Multiple Cause of Death data from 2000-2004 and compared mortality rates between Latinos and non-Latinos. They found that Latino men had higher rates of alcohol-related cirrhosis deaths than non-Latino men (Yoon et al., 2011). Among the Latino subgroups, Mexican American men had higher rates of alcohol-related cirrhosis deaths, while Cuban men had the least. Among women, Mexican American women had the highest rates of alcohol-related cirrhosis death, although at much lower rates than men (Yoon et al., 2011).

<center>Latino Health</center>

Aguila, Escarce, Leng and Morales (2013) analyzed data from the 2003 Mexican Health and Aging Study and the 2004 Health and Retirement study to compare the health status of four different groups of adults over the age of 50. The samples were comprised of Mexican adults living in the United States, Mexicans with no migration history living in Mexico, Mexican returned migrants living in Mexico, and non-Hispanic Whites. The authors analyzed variables of self-reported health, chronic health risk conditions, activities of daily living, obesity, smoking, and alcohol use (Aguila et al., 2013). The authors found that Mexican immigrant males between the ages 50 to 59 living in the United States had lower rates of certain chronic illness such as hypertension, lung disease, arthritis and reported smoking less than Mexican adults who never immigrated,

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returned Mexican immigrants, and non-Hispanic Whites. Interestingly, Mexican females from all the groups reported higher chronic health risk conditions, with the exception of smoking and heavy drinking, than the males in the Mexican groups. Additionally, female Mexican immigrants in the United States reported lower rates of lung disease but reported more trouble with activities of daily living than non-migrants, return migrants, and non-Hispanic Whites. Non-Hispanic White females reported higher rates of strokes, arthritis, and heavy drinking than all of the Mexican groups. Aguila et al. also found that Mexican immigrants who returned to Mexico reported higher rates of lung disease and smoking than all the other groups. The findings may suggest that healthy Mexican adults who immigrated to the United States are returning to Mexico while Mexican older adults with health conditions stay in the United States. Moreover, Mexican immigrants had the lowest rate of excellent self-reported health among all the groups studied (Aguila et al., 2013).

Dorantes-Mendoza, Avila-Funes, Mejia-Arango and Gutierrez-Robledo (2007) conducted a secondary analysis on data collected from the 2001 National Study on Health and Aging in Mexico. The study involved 7,171 Mexican adults over the age of 60. The authors examined factors of activities of daily living, instrumental activities of daily living, infancy health, social problems, chronic health problems such as diabetes, hypertension, depressive symptoms, and cognitive deterioration, alcohol and tobacco use, as well as previous employment history. Dorantes-Mendoza et al. found that an estimated 25% of functionally independent adults and estimated 23% of adults who needed help with activities of daily living had been criticized for their drinking habits.

The authors further found that 36% of functional adults and an estimated 66% of adults who were dependent on alcohol reported depressive symptoms.

<p style="text-align:center;">Alcohol Use and Treatment</p>

A concern for the Latino community is that Latinos are often less likely than other groups to seek treatment for their risky alcohol use. Chartier and Caetano (2011) analyzed treatment utilization among Latinos, non-Hispanic Whites, and African Americans. When compared to non-Hispanic White adults, Latinos were less likely to utilize alcohol treatment programs. Furthermore, Latinos were also less likely to use mutual aid services such as Alcoholic Anonymous when the severity of their alcohol use increased, compared to non-Hispanic Whites, and African Americans (Chartier & Caetano, 2011). However, as age increased adults from all ethnic groups were more likely to utilize alcohol treatment programs. All three ethnic groups were more likely to utilize the emergency room for alcohol problems and less likely to seek professional care (Chartier & Caetano, 2011). Similarly, researchers found that Latinos rarely used treatments targeted at alcohol misuse (Zemore, Mulia, Ye, Borges, & Greenfield, 2009). The authors used data from United States National surveys conducted in 1995, 2000 and 2005 to examine treatment and barriers to alcohol treatment among 4,204 Latino men and women. They found that those who answered the survey in English were more likely to seek and receive treatment from hospitals, clinics, social services, and professionals. The most common form of treatment was Alcoholics Anonymous. According to Zemore et al. approximately 3% of participants had received any alcohol treatment and only an estimated 19% of those who were alcohol dependent had received treatment.

Arroyo, Miller, and Tonigan (2002) analyzed treatment effectiveness for 12 step facilitation therapy (TSF), cognitive behavioral therapy (CBT), and motivational enhancement therapy (MET) among 105 non-Hispanic Whites and 100 Latinos. The authors found that non-Hispanic Whites in the TSF group drank less on the days that they consumed alcohol while Latinos reported higher alcohol consumption on the days that they consumed alcohol. Overall, non-Hispanic Whites who were in the TSF therapy group drank less than Latinos and non-Hispanic Whites in both the MET and CBT groups. Among Latinos, the level of acculturation was not associated with their response to treatment.

Jacobson, Robinson and Bluthenthal (2007) analyzed intake data from all publicly funded outpatient and residential alcohol treatment recovery programs between 1998 and 2000 and compared completion rates among African Americans, non-Hispanic Whites, and Latinos. Participants included 10,591 who were 18 years or older and whose substance use was alcohol. Jacobson et al. discovered that staff were more likely to regard African Americans as having progressed less towards their goals and it was found that they were less likely to complete care than other ethnic groups. Interestingly, Latino clients had a greater chance of completing out-patient treatment than non-Hispanic Whites. In residential treatment care, Latinos and non-Hispanic Whites had the same low completion rate of less than 50% (Jacobson et al., 2007).

<u>Access to Treatment</u>

Marsh, Cao, Guerrero and Shin (2009) analyzed data from the National Treatment Improvement Evaluation Study gathered between 1992 and 1997 on substance use treatment programs and clients. The participants included 3,142 clients: 1812 African

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Americans, 486 Latinos, and 844 Whites from 59 different facilities. Results showed that ethnic minorities in the United States are underserved in substance abuse treatment programs when compared to non-Hispanic Whites. Moreover, Marsh et al. found that often African Americans and Latinos entered lower quality substance use treatment programs but they also stayed in treatment programs less time. In addition, Latinos and African Americans had higher levels of substance use before and after treatment. Latinos were often served in organizations that offered fewer services on site and shorter counseling appointment times. African American and Latino participants also reported fewer social and economic resources than their counterparts.

Suarez-Morales et al. (2010) conducted a secondary analysis of data from a clinical trial by the National Institute on Drug Abuse's Clinical Trials Network (CTN). The authors examined whether the variables of the therapist's level of acculturation and the client's birthplace impacted the treatment and level of substance use of the client in outpatient treatment. Participants included 16 therapists and 235 clients from the CTN trial. The majority of the participants were born in Mexico and the primary language was Spanish. Suarez-Morales et al. found that there was no significant relationship between the therapist's birth of origin and acculturation level and the client's participation in treatment. However, the therapist's nativity and level of acculturation did predict the number of days that Spanish-speaking clients used substances during treatment (Suarez-Morales et al., 2010). Participants with therapists who were more acculturated to the mainstream United States culture often reported a higher rate of substance use. Those who had less "Americanized" therapists reported fewer days of substance use. Generally,

clients whose therapists were born in Latin America reported higher substance use while in treatment.

Similarly, Shorkey, Windsor and Spence, (2008) conducted focus groups with African American, Latino, and non-Hispanic White mental health professionals who had experience working with Mexican American adults and teenagers from six substance use treatment programs. The health professionals rated the factors they perceived to be the most important for successfully treating clients. The mental health professionals all rated counselor characteristics, such as — the ability to build rapport with client, as the most important followed by the counselor's understanding of the role of the family in Mexican American culture; the agency's ability to provide services in Spanish, the agency's ability to provide referrals; and the agency's understanding of Mexican American culture and its application to services, the community, and the environment. Interestingly, Mexican American mental health professionals perceived that the agency's ability to provide services in Spanish was second in importance (Shorkey et al., 2008).

<u>Conclusion</u>

This review of the literature suggests that Latinos in the United States are comprised of several demographic subgroups with differences including the use of language, income, health conditions, and mental health. Additionally Latinos have different drinking patterns depending on their cultural subgroup and high rates of binge drinking among some. This kind of drinking pattern has a strong impact on health related issues, particularly for Latinos due to the high incidence of alcohol-related cirrhosis found in that population. Additionally, among Latinos, older adults often had different views of mental health use and alcohol treatment utilization than their younger

counterparts. Exacerbating the issue is that Latinos are less likely to access quality

programs and less likely to stay in treatment. The present research aims to examine the

alcohol use patterns, chronic health conditions, mental health, and both mental health

treatment and alcohol use treatment utilization of Latinos over the age of 50.

The Behavioral Model for Vulnerable populations has four factors that impact a

population from accessing the mental health and health care they need: Enabling,

predisposing, need and factors that are related to health services. These factors applied to

the variables analyzed in this study. The Latino participants' age, gender, ethnicity and

language spoken are predisposing factors. Enabling factors include a participant's

geographic location of their community, family income, and poverty level. The need

factors in this study are the participant's different health and psychological conditions.

CHAPTER 3

METHODS

Data Collection

A secondary data analysis was conducted using the NSDUH of 2012 from

SAMHSA. The NSDUH used random selection of households from all 50 states as well

as District of Columbia to recruit participants. There was 68,309 participants (SAMHSA,

2013b). Interviewers were sent to the chosen households and selected one to two

respondents from each household. The respondents gave most of their responses through

a laptop to ensure privacy. For some questions, the interviewer had to read the question

out loud and entered the response for the participant. The interview took an estimated

hour to complete (NSDUH, n.d.). For the current research the public use data were

downloaded from the SAMHSA site and variables irrelevant to this study were removed.

Participants

For the purpose of this study, only data collected from 395 adults were included.

The requirements were participants who were Latino, over the age of 50, and reported

consuming at least one alcoholic beverage in their lifetime. There are 199 female

participants and 196 male participants.

Procedure

The researcher focused on Latino adults over the age of 50. The researcher then

examined recoded variables assessing the participant's gender, age, alcohol use, use of

mental health services and substance treatment, and subjective health rating. The

researcher will also examine variables that assessed the participant's mental health such

as adult depression and anxiety in the past year prior to the survey. This was done in

order to get a greater understanding of the drinking patterns of Latino participants as well

as to examine the relationships between drinking patterns and age, gender, and the use of

alcohol use treatment and mental health services.

<div align="center">Key Variables</div>

The variables that were utilized to answer the research questions were chosen

based on the Behavioral Model for Vulnerable Populations (Anderson, 1995). This

model integrates four factors that affect a population's access to health care:

predisposing, enabling, need and factors that are related to health services. In Table 1,

the variables chosen for this research are displayed.

<div align="center">Measurement Tool</div>

The NSUDH utilized the Kessler 6 scale (K6) to measure psychological distress

in individuals over the age of 18 (SAMSHA, 2013a). The NSUDH measured an

individual's past month and past year psychological distress prior to the survey. The K6

is comprised of 6 questions. Participants had to rate how often they felt nervous,

hopeless, sad, restless, worthless, and that everything was an effort. Each question

ranged in score from 0 to 4. A response of 0 indicated a participant felt like that none of

the time. While a response of 4 indicated that a participant felt like all the time. The

scores for each question were then summed for a total score. Total scores ranged from 0

to 24. A score of 13 or greater indicated psychological distress (SAMHSA, 2013a).

Data Analysis

The researcher utilized the Statistical Package for the Social Sciences (SPSS) version 22 to analyze the data in order to answer the research questions. The significance level was an alpha ($p < .05$). In order to analyze the demographics of the sample chosen, the researcher conducted a univariate analyses of frequencies, percents, means, and standard deviations.

Bivariate analyses were conducted on the variables in order to answer the research questions. Independent samples *t*-tests were conducted on the continuous variables of the predisposing, enabling, need and health service factors and with the categorical variables that had two groups. One way Analysis of Variance (ANOVA) testing was conducted on the categorical variables of the predisposing factors with the need variables. Pearson's *r* correlations were conducted on the continuous need variables in order to measure the extent to which the variables were related. Pearson's chi-square analyses were conducted on the categorical variables of the predisposing, enabling, need and factors of health services variables in order to determine which factors were related to health care access. Logistic regression analysis was conducted on selected predisposing, enabling, and need factors to examine what factors would most likely determine who received mental health care.

TABLE 1. Variables from Behavioral Model for Vulnerable Populations

Predisposing Factors	Age	Language
	Education	Marital Status
	Gender	
Enabling Factors	Geographical Area	Health Insurance Status
	Poverty Level	
Need Factors	Alcohol Abuse	Past Year K6 score
	Alcohol Dependence	Asthma
	Days had one or more drinks	Cirrhosis
	Days had 5 or more drinks	Diabetes
	Days per week drank alcohol	Anxiety
	Days alcohol usage past year	Depression
	Alcohol Binge Use	Heart Disease
	Alcohol Heavy Use	High Blood Pressure
	Self-Perceived Health Status	
Health Service Factors	Alcohol Use Treatment	Mental Health Treatment

CHAPTER 4

RESULTS

The NSDUH of 2012 from the SAMHSA ([NSUDH], 2013) was analyzed in

order to answer five research questions: (1) What are the drinking patterns for older adult

Latinos? (2) Do the age and gender influence the drinking patterns of older adult

Latinos? (3) How does alcohol use affect the self-perceived health status and chronic

health illness of Latinos? (4) Is there a relationship between the drinking patterns of

older adult Latinos and their mental health status? (5) What factors influence whether

Latinos seek alcohol use and mental health treatment?

The Behavioral Model for Vulnerable Populations was utilized as a theoretical

framework to select variables and to analyze what factors influenced whether Latino

older adults received alcohol use and mental health treatment.

<u>Description of the Sample</u>

Univariate analysis was conducted in order to describe the sample. See Table 2

for description of the sample. There were a total of 395 Latino older adults participants.

The majority of the Latino older adults were between the ages of 50 to 64 and a quarter

were 65 years and older. There was an equal amount of women and men in the sample.

A majority of the sample indicated they preferred to take the survey in English. Most

Latino older adults who were surveyed resided in a large metropolitan area and were

married. Only a small minority had received alcohol use treatment and mental health

treatment in the year prior to the survey.

Drinking Patterns for Older Adult Latinos

The alcohol use of older adult Latinos was analyzed utilizing univariate analyses. These can be seen in Table 3. Less than half of the older adult Latinos in the sample reported using alcohol in the 30 days prior to the survey. Participants reported approximately 3 days ($M = 2.54$, $SD = 1.81$) on which they drank per week in the past 30 days. On average, they drank on 7 days in the past month ($M = 6.79$, $SD = 7.74$). Participants also reported on average they had five or more drinks on three different occasions in the past 30 days ($M = 2.53$, $SD = 9.40$).

TABLE 3. The Drinking Patterns of Latino Older Adults

	F	%
Used alcohol in the past 30 days	174	44
Binge alcohol use in the past 30 days	71	18
Heavy alcohol use in the past 30 days	17	4.3
Met criteria for Alcohol abuse in the past year	4	1
Met criteria for Alcohol dependence in the past year	9	2

Factors that Influence Alcohol Use

Independent samples *t*-tests were conducted on the alcohol use of older adult Latinos in order to determine if age and gender impacted their alcohol use. Age did not impact the number of days in which Latino older adults had at least one alcoholic drink, the number of days in which they participated in binge drinking, or the number of days in which older adults drank per week. However, Latinos between the ages of 50 to 64 ($M = 72.15$, $SD = 89.79$) reported a greater number of days in which they drank alcohol in the year than Latinos over the age of 60 ($M = 46.83$, $SD = 55.11$), $t(96.33) = 2.36$, $p = .02$). See Table 4 for *t*-test results.

Additional statistical analysis did show that gender impacted the drinking patterns of older adult Latinos. The number of days that participants had at least one alcoholic beverage was higher for men ($M = 9.00$, $SD = 9.28$), than for women ($M = 4.61$, $SD = 5.01$), $t(124.3) = 3.77$, $p = .05$). Additionally, the total number of days that participants used alcohol in the year was higher for men ($M = 80.69$, $SD = 93.43$) than for women ($M = 54.06$, $SD = 73.39$), $t(219.21) = 2.41$, $p = .05$). However, there were no significant differences between genders and the number of days they participated in binge drinking and the number of days per week in which they drank alcohol. See Table 5 for independent samples t-test results for alcohol use patterns by age and gender.

Moreover, the alcohol use patterns of the Latino sample was also analyzed for the age groups separate by gender. Men, ages 50 to 64 ($M = 92.44$, $SD = 101.61$) had a higher total number of days that they drank alcohol in the year than men over the age of 65 ($M = 46.63$, $SD = 54.35$), $t(92.30) = 3.15$, $p = .05$). However, male gender did not impact the number of days they had at least one alcoholic drink, the number of days in which they participated in binge drinking, and the number of days per week they drank. Being female in the two different age groups, 50 to 64 and 65 years and older, also did not impact the number of days in which they at least one alcoholic drink, the number of days in which they participated in binge drinking, the number of days per week they drank alcohol, as well as the total number of days in which they drank in the past year. See Table 5 for t-test results for drinking patterns by age and gender.

Alcohol Use, Self-Perceived Health Status and Chronic Health Illnesses

A one way analysis of variance (ANOVA) was conducted on self-perceived health status and alcohol binge use in the past 30 days: excellent ($M = 6.42$, $SD = 20.36$),

very good (*M* = 1.02, *SD* = 2.28), good (*M* = 1.52, *SD* = 2.25), and fair/poor (*M* = 2.47,

SD = 5.21). There was no significant differences between groups (*F*(3,161) = 2.40, *p* =

.70). However, post hoc Fisher's LSD analysis showed that participants who rated their

health as excellent had significantly greater number of days in which they participated in

binge drinking in the month than those who rated their health as very good (*p* = .01) and

good (*p* = .02).

There was no significant differences among the male participants who rated their

self-perceived health status as excellent (*M* = 9.33, *SD* = 26.51), very good (*M* = 1.80, *SD*

= 3.17), good (*M* = 2.12, *SD* = 2.59), fair/poor (*M* = 4.05, *SD* = 6.79) and the number of

days in which they had five or more alcoholic drinks, (*F* (3,78) = 1.63, *p* = .20). Also, no

significant differences were found among females: excellent (*M* = 5.23, *SD* = 17.88),

very good (*M* = .40, *SD* = .816), good (*M* = .58, *SD* = .84), fair/poor (*M* = .71, *SD* = 1.05)

and the number of days they drank five or more alcoholic drinks, (*F*(3,79) = 1.39, *p* =

.25).

Latinos who reported not having asthma (*M* = 6.99, *SD* = 8.02) reported a higher

number of days in which they had at least one drink than Latinos who did report having

asthma (*M* = 4.08, *SD* = 2.53), t(39.51) = 3.03, *p*< = .001). Similarly, Latinos who

reported no past year depression (*M* = 6.99, *SD* = 8.01) reported a higher number of days

in which they had one or more drinks than Latinos who reported having past year

depression (*M* = 4.29, *SD* = 3.65), *t*(29.96) = 2.30, *p* = .03). Moreover, older adult

Latinos who reported having high blood pressure (*M* = 9.02, *SD* = 8.93) also reported a

higher number of days in which they drank more than one alcoholic drink than Latinos

who did not report having high blood pressure (*M* =5.57, *SD* = 6.82), t(89.39) = -2.53, *p*

= .05). No differences were noted for other chronic health conditions of anxiety, cirrhosis, diabetes, and heart disease. Independent samples *t*-tests conducted on these same chronic illness and binge drinking indicated no differences between Latinos who reported these chronic health conditions and those who reported not having these illnesses. See Table 6 for independent samples *t*-test results.

Drinking Patterns and Mental Health Status

The mental health status of Latino older adults was analyzed by utilizing their K6 scores, which measures psychological distress in individuals. Independent samples *t*-test analyses were conducted on whether an older adult met the criteria for psychological distress score and their drinking patterns. There was no significant differences in whether they reported psychological distress in the past year, the number of days in which they drank at least one alcoholic beverage and the number of days in which they participated in binge alcohol use.

Latinos who did met the criteria for psychological distress reported a higher number of days ($M = 21.61$, $SD = 8.52$) in which they had one or more drinks than Latinos who did not met the psychological distress criteria ($M = 8.52$, $SD = 8.81$), $t(80) =$ -2.49, $p = .02$). There was no significant difference among Latino men who met the psychological distress criteria for year prior to the survey and those who did not meet the criteria and the number of days in which they binged. There was no significant differences between Latinas who met the psychological distress criteria and those who did not and the number of occasions which they participated in binge alcohol use and the number of days which they drank one more alcoholic drinks in the past 30 days. See Table 7 for independent samples *t*-test results.

Pearson's correlation analyses were conducted on the total psychological distress scores from the month prior to the survey and the drinking patterns of older adults Latinos. There was no significant relationship between psychological distress scores in the past month and the number of days in which they had one or more alcoholic beverages, $r(165) = .06$, $p = .43$. Furthermore, no relationship was found between psychological distress scores in the past month and the number of days in which they participated in binge drinking the past month, $r(165) = -.04$, $p = .59$.

Pearson's correlation analysis found a positive relationship between Latino men's psychological distress score in the past month and the number of days they drank one or more alcoholic drinks in the past month, $r(82) = .22$, $p = .04$. However, no significant relationship was found between men's psychological distress scores the month prior to the survey and the number of occasions in which they participated in binge drinking during the past month, $r(82) = .02$, $p = .86$. There was no significant relationship found between Latina's psychological distress score in the past month and the number of days they had one or more alcoholic drinks $r(83) = -.05$, $p = .67$, as well as the number of days they had five or more drinks on one occasion $r(83) = -.08$, $p = .47$.

Factors Influencing Alcohol Use and Mental Health Treatment Utilization

Chi-square analyses were conducted on the variables of age, poverty thresholds, insurance coverage, depression, psychological distress scores, and anxiety and the variables indicating whether they received mental health and alcohol use treatment. The data showed no significant relationship between age, poverty level, total family income, individual family income, marital status, geographical location where the participants lived, level of education, depression in the past-year, and anxiety in the past year and

whether these older adults received any alcohol use treatment. However, male Latinos were more likely to receive alcohol treatment than Latinas, $X^2 = (1, N = 395) = 4.10$, $p = .04$. See Table 8 for chi-square results. Adults who had received alcohol treatment had higher psychological distress scores ($M = 9.25$, $SD = 7.41$) than those who did not receive any alcohol treatment ($M = 3.28$, $SD = 4.57$), $t(393) = -2.59$, $p < .01$).

The chi-square statistical analyses conducted on age, education, preferred language, gender, marital status, poverty level, and geographical location resulted in no statistical relationship between these variables and whether Latino older adults received any mental health treatment in the past year. However, Latino adults who reported anxiety in the past year were more likely to receive mental health treatment, $X^2 = (1, N = 389) = 64.60$, $p < .001$). Similarly, Latino older adults who reported depression in the past year were more likely to receive mental health treatment, $X^2 = (2, N = 387) = 63.60$, $p<.001$. See Table 9 for chi-square results. Also, an independent samples t test analysis found that Latino participants who had received mental health treatment in the past year reported higher psychological distress scores in the month prior to the survey ($M = 7.71$, $SD = 6.63$) than Latinos who did not receive mental health treatment ($M = 2.88$, $SD = 4.11$), $t (40.09) = 4.40$, $p = .01$).

Additionally, variables from the three domains of the Behavioral Model for Vulnerable Populations were candidates for the logistic regression model (Table 10). For the resulting model of the predisposing variables, the likelihood of receiving mental health treatment in the past year (OR = 0.29) was lower for those with less than a high school diploma. The enabling factor of living below the federal poverty threshold was associated with greater odds of receiving mental health treatment (OR = 2.30). Of the

need variables that were retained in the model, alcohol dependence, anxiety, and

depression increased the odds of receiving treatment (OR = 14.34; 10.33; and 5.84,

respectively).

CHAPTER 5

DISCUSSION

Summary of Findings

The purpose of this study was to examine the alcohol use and mental health treatment of adult Latinos over the age of 50. Moreover, other demographic variables were also analyzed to determine what factors influenced the mental health treatment and alcohol use treatment utilization of older adult Latinos. This research utilized the Behavioral Model for Vulnerable Population as a guideline to select key variables to analyze and describe the data from the NUSDH survey.

The findings highlight important issues in regards to Latino older adults and their patterns of alcohol use. The present study found that both age and gender were factors that determined the alcohol use of older adult Latinos. In particular, men and those ages 50 to 64 reported a higher total number of days in which they used alcohol in the past year prior to the NSUDH survey. Latino adults ages 50 to 64 drank alcohol almost twice (93 days) as many days in the past year than Latino men ages 65 and older (47 days). These finding are consistent with Caetano et al.'s (2008) in which among Mexican American men ages 50 to 59 had the highest rate of alcohol use compared to other Latino subgroups or age groups. Caetano et al. (2008) found that a risk factor for alcohol use among Latinos over the age of 18 was male gender. Latino men, in general, might use alcohol more than Latino women due to the cultural norms.

No statistical significant differences were found when comparing binge drinking between Latina women and Latina men within the different age groups. However, the findings did point out that 18% of this Latino older adult sample participated in alcohol binge use. On average, participants binged on three different occasions in the month prior to the survey.

Although there was no statistical differences, adult women and men ages 65 and older did have a higher average of days in which they participated in binge drinking than their counterparts, adults 50 to 64 years of age. Similarly, Merrick et al. (2008) found that Latino men were more likely to participate in binge alcohol use. Moreover, men and adults over the age of 65 often exceeded the monthly or daily drinking limits (Merrick et al, 2008). Moreover, Latino males, over the age of 50, have higher rates of binge drinking than the national average (SAMHSA, 2010).

In regards to health, Latino adults who reported having high blood pressure also reported a higher number of days in which they drank alcohol than Latinos without high blood pressure. In contrast, Latino older adults who reported having asthma and depression had fewer days in which they used alcohol. Surprisingly, Latino older adults who perceived their health as excellent had more days in which they participated in binge drinking than those who rated their health as very good. These findings are not consistent with Asssari's (2013) findings that problematic alcohol use was associated with worse self-perceived health status.

Latino men who reported psychological distress also reported a higher number of days in which they drank than non-psychologically distressed older adult Latinos. Alarmingly, Latino men who met the criteria for psychological distress reported an

estimated 21 days in which they drank at least one alcoholic drink in the month prior to the survey. In particular, among Latino men, the more days they drank alcohol in a month, the more their psychological distress score increased. Latino adults who did receive alcohol treatment and mental health treatment tended to report being psychological distressed. Surprisingly, no statistical significance was found between Latino older adults binge drinking and their psychological distress. Bryant and Giveon (2013) found that higher levels of binge drinking were associated with higher levels of psychological distress (Bryant & Giyeon, 2013).

In this sample, 1% of the older adult Latinos met the criteria for alcohol abuse and 3% met the criteria for alcohol dependence. However, only 1% of the total sample reported receiving alcohol use treatment in the year prior to the survey. Similarly, Chartier and Caetano (2011) found that when compared to non-Hispanic White adults, Latinos were less likely to utilize alcohol treatment programs. Researchers also found that Latinos rarely used treatments targeted at alcohol misuse (Zemore et al., 2009). Consistent with the literature, the findings in this study indicated that older adult Latinos with alcohol dependence were more likely to receive mental health treatment. Older adult Latinos most likely to seek mental health treatment were those who lived in poverty or below the federal poverty threshold and who reported having depression, anxiety, and alcohol dependence. However, older adults with less than a high school education were less likely to receive mental health treatment. Older Latino adults who did receive alcohol treatment tended to be men.

Implications For Social Work Policy And Practice

Based on the findings of this study, there are several implications for social work practice and policy. The findings of this study highlight that Latino older adults who binged often had a higher level of psychological distress. Moreover, Latino older adults are unlikely to seek alcohol use treatment. Additionally, older adults with alcohol dependence, depression, and anxiety were more likely to seek mental health treatment than alcohol use treatment. Therefore, it is important for social workers in the mental health setting to be aware that older adult Latinos may not always seek alcohol use treatment for their risky alcohol behaviors but instead may seek mental health treatment. As a result, the practice and policy of screening and assessing for alcohol dependence and abuse should be implemented for older adult Latinos who present with depression, anxiety, and psychological distress. It should also be noted that a risk factor for problematic alcohol use among Latinos has been male gender and being over the age of 50.

In general, older adults should not exceed three drinks in 1 day or seven in 1 week (NIAAA, 2005). However, in this current study, participants, over the age of 60, on average drank five or more alcoholic beverages 7 days out of the month. Latino older adults between the ages 50 and 64 binged on two occasions in the month prior to the survey. Therefore it is important for social workers to provide culturally sensitive education on the risks of alcohol use pose on mental and physical well-being. The findings highlighted that only 1% of the 4% who had alcohol abuse and dependence sought alcohol use treatment in the previous year of the survey, which points to a treatment gap. Providing culturally competent outreach and education regarding alcohol

use and its impact on well-being is important in order to increase the utilization of culturally competent alcohol treatment.

Limitations

In this secondary analysis, there were several limitations. Once the participants met the criteria, only a small sample was left which limited the benefits of a large sample such as the likelihood of finding statistical significance. The researcher could not analyze the differences among Latino subgroups as well as compare U.S. born and foreign bor Latinos due to the method in which NSUDH data were collected and recoded. The NSUDH's data are collected using a survey. As a result, participants may have wanted to provide socially desirable answers.

Implications for Future Research

There are several recommendations for future research. Future quantitative studies should be able to compare Latino subgroups in order to increase generalizability. Latinos are not homogenous and there are several differences within the Latino subgroups. It is important to examine the differences within the Latino subgroups in regards to their use of alcohol, mental health services, and alcohol use treatment, as well as to compare U.S born Latinos and foreign born Latinos. Additionally, a qualitative analysis could help gain more insight on the beliefs and practices of older adult Latinos regarding alcohol use, mental health treatment and alcohol use treatment. Moreover, an evidence-based intervention aimed at Latino older adults that seeks to educate them on safe alcohol use and the benefits of integrated health care, as well as reduces stigma regarding alcohol use and mental health treatment, would also be beneficial. Researching

and understanding these differences can help create more culturally competent practices,

programs and policies.

APPENDIX

TABLES

TABLE 2. Demographic Description of Sample, $N = 395$

Predisposing Factors	f	%
Age		
50 to 64	294	74.4
65 and older	101	25.6
Gender		
Male	196	49.6
Preferred Language		
Spanish	130	32.9
Education		
< High school diploma	123	31.1
High school graduate	131	33.2
Some college education	89	22.5
College graduate	52	13.2
Marital Status		
Married	240	60.8
Widowed	36	9.1
Divorced/Separated	93	23.5
Never been married	26	6.6
Enabling Factors		
Geographical Location		
Large Metropolitan	244	61.8
Small Metropolitan	109	27.6
Non-Metropolitan	42	10.6
Health Insurance (yes)	322	81.7
Poverty Level		
Living in poverty	90	22.8
Income two times federal poverty threshold	108	27.3
Twice the federal poverty threshold	197	49.9
Need factors		
Self-Perceived Health Status		
Excellent	52	13.2
Very Good	85	21.5
Good	137	34.7
Fair/Poor	121	30.6
Asthma Lifetime	33	8.4
Anxiety Lifetime	22	5.6
Cirrhosis Lifetime	4	1
Diabetes Lifetime	90	23.1
Depression Lifetime	41	10.4
Heart Disease Lifetime	33	8.5
High Blood Pressure Lifetime	129	32.7
Health Service Factors		
Alcohol treatment in the past yr.	4	1
Mental health treatment in the past yr.	38	9.6

TABLE 4. Drinking Pattern Means By Gender & Age

	Age		*t*	*df*
	50 to 64	65 and older		
All Latino older adults				
Days 1 or more drinks	7.13	5	1.29	163
	(7.71)	(7.83)		
Days had 5 or more drinks	1.70	6.74	1.23	26.4
	(4.70)	(21.77)		
Days per week drank	2.65	1.82	1.43	78
alcohol in past month	(1.85)	(1.40)		
Days alcohol usage past yr.	72.15	46.83	2.36**	96.33
	(89.79)	(55.11)		
Men				
Days 1 or more drinks	9.74	6.18	1.42	80
	(9.15)	(9.48)		
Days had 5 or more drinks	2.62	5.82	.68	16.45
	(4.42)	(19.21)		
Days per week drank	2.83	1.63	2.12	11.55
alcohol in past month	(1.71)	(1.41)		
Days alcohol usage past yr.	92.44	46.63	3.15*	92.30
	(101.61)	(54.35)		
Women				
Days 1 or more drinks	4.84	2.78	1.17	81
	(5.24)	(1.79)		
Days 5 or more drinks	.89	8.30	.93	9.05
	(3.57)	(25.20)		
Days per week drank	2.41	2.33	.07	30
alcohol in past month	(2.04)	(1.53)		
Days alcohol usage past yr.	54.85	47.33	.33	112
	(75.08)	(59.44)		

Note. * $p = .05$, ** $p = .02$

TABLE 5. Drinking Patterns by Gender

	Gender		*t*	*df*
	Women	Men		
Days 1 or more drinks	4.61	9	3.77*	124.3
	(5.01)	(9.28)		
Days 5 or more drinks past month	1.78	3.28	1.02	163
	(9.31)	(9.49)		
Days drank alcohol past month	2.41	2.63	.53	78
	(1.98)	(1.71)		
Days in past year used alcohol	54.06	80.69	2.41*	219.21
	(73.39)	(93.43)		

Note. * $= p = .05$

TABLE 6. Lifetime Chronic Health Conditions & Past Month Alcohol Use

| | Health Condition | | | | |
	No	Yes	T	df	p
Anxiety					
Days had 1 or more drinks	6.93	3.78	1.19	161	.24
	(7.90)	(3.70)			
Days had 5 or more drinks	2.60	.75	.54	162	.59
	(9.66)	(.89)			
Asthma					
Days had 1 or more drinks	6.99	4.08	3.03*	39.51	.004
	(8.02)	(2.53)			
Days had 5 or more drinks	2.68	.02	.76	162	.45
	(9.81)	(1.19)			
Cirrhosis					
Days had 1 or more drinks	6.06	16	1.71	161	.09
	(7.67)	(12.73)			
Days had 5 or more drinks	2.51	2.50	.00	162	.99
	(9.48)	(3.54)			
Diabetes					
Days had 1 or more drinks	6.82	6.43	.24	161	.81
	(7.85)	(7.41)			
Days had 5 or more drinks	2.54	2.36	.10	162	.92
	(10.00)	(5.76)			
Depression					
Days had 1 or more drinks	6.99	4.29	2.30*	29.96	.03
	(8.01)	(3.65)			
Days had 5 or more drinks	2.67	.69	.72	162	.47
	(9.81)	(.86)			
Heart Disease					
Days had 1 or more drinks	6.40	12.89	1.75	8.43	.11
	(7.42)	(11.01)			
Days had 5 or more drinks	2.56	1.67	.276	162	.78
	(9.69)	(1.94)			
High blood pressure					
Days had 1 or more drinks	5.57	9.02	2.53*	89.39	.01
	(6.82)	(8.93)			
Days had 5 or more drinks	2.61	2.32	.19	162	.85
	(10.90)	(5.69)			

TABLE 7. Psychological Distress in the Last Year & Past Month Alcohol Use

| | Past Year Psychological Distress | | | | |
	Yes	No	*t*	*df*	*p*
All Latino older adults					
Days had 1 or more drinks	7.92	6.70			.59
	(10.31)	(7.56)	0.55	163	
Days had 5 or more drinks	1.43	2.60			.70
	(2.12)	(9.72)	.39	163	
Men					
Days had 1 or more drinks	21.67	8.52	2.49	80	.02
	(14.43)	(8.81)			
Days had 5 or more drinks	3.67	3.27	.07	80	.94
	(3.22)	(9.65)			
Women					
Days had 1 or more drinks	3.80	4.73	.55	81	.59
	(3.67)	(5.18)			
Days had 5 or more drinks	.63	1.91	.37	81	.71
	(.74)	(9.79)			

TABLE 8. Chi Square of Demographic and Psychological Variables and Alcohol Treatment

Variables	Received Alcohol Treatment				
	No		Yes		
	f	%	f	%	X^2
Age					1.39
50-64	290	(98.6%)	4	(1.4)	
65 & older	101	(100%)	0	(0)	
Anxiety					3.53
No	368	(95.3)	3	(75)	
Yes	18	(4.7)	1	(25)	
Depression					.36
No	352	(91.7)	4	(100)	
Yes	32	(8.3)	.3	(0)	
Education					2.24
< High school	121	(98.4)	2	(1.6)	
High school	129	(98.5)	2	(1.5)	
Some college	89	(100)	0	(0)	
College graduate	52	(100)	0	(0)	
Preferred Language					1.98
English	261	(98.5)	4	(1.5)	
Spanish	130	(100)	0	(0)	
Gender					4.10[*]
Male	192	(98)	4	(2)	
Female	199	(100)	0	(0)	
Geographic Location					2.40
Large Metro	243	(99.6)	1	(.04)	
Small metro	101	(98.2)	2	(1.8)	
Rural	41	(97.6)	1	(2.4)	
Marital Status					3.54
Married	237	(98.8)	3	(1.3)	
Widowed	36	(100)	0	(0)	
Divorced/separated	93	(100)	0	(0)	
Never married	25	(96.2)	1	(3.8)	
Poverty level					1.27
Living in poverty	89	(98.9)	1	(1.1)	
Income up 2x fed pov threshold	106	(106.9)	2	(1.1)	
Income greater 2x fed pov thereshold	196	(99.5)	1	(2)	

Note. [*]= $p \le .05$

TABLE 9. Chi Square of Demographic and Psychological Variables and Mental Health Treatment

| Variables | Received Mental Health Treatment | | X^2 |
| | No | Yes | |
	f %	f %	
Age			.46
50-64	263 (89.8)	30(10.2)	
65 & older	93 (92.1)	8 (7.9)	
Anxiety in the past yr.			64.6[*]
No	344 (98)	26(68.4)	
Yes	7 (2)	12 (31.6)	
Depression in the past yr.			63.6[*]
No	333 (95.4)	22(57.9)	
Yes	16(4.6)	16(42.1)	
Education			.79
< high school	121(98.4)	2(1.6)	
High school	129 (98.5)	2(1.5)	
Some college	89(100)	0(0)	
College graduate	52(100)	0(0)	
Preferred Language			.04
English	180(91.8)	16(8.2)	
Spanish	118 (90.8)	12(9.2)	
Gender			.98
Male	192(98)	4(1.5)	
Female	4(2)	0(0)	
Geographic Location			1.29
Large Metro	218 (89.7)	25(10.3)	
Small metro	98(89.9)	11(10.1)	
Rural	40(95.2)	2(4.8)	
Marital Status			1.36
Married	217(90.8)	22(9.2)	
Widowed	2(5.6)	34(94.4)	
Divorced/separated	82(88.2)	9(11.8)	
Never married	23(88.5)	3(11.5)	
Poverty level			11.83[*]
Living in poverty	73 (81.1)	17(18.9)	
2x fed threshold	99(91.7)	9(8.3)	
greater 2x fed threshold	184(93.9)	12(6.1)	

Note. [*] = $p \leq .05$

Table 10. Logistic Regression Model for Mental Health Treatment

Variables	B	Wald* χ^2	P	OR	95% CI	
					Lower	Upper
Predisposing						
< High school	-1.25	3.19	.07	.286	.07	1.13
Enabling						
Poverty	1.097	3.60	.056	2.30	.965	9.30
Need						
Anxiety	2.335	11.44	.001	10.33	2.67	39.98
Alcohol	2.663	7.45	.006	14.34	2.19	97.00
Depression	1.765	10.52	.001	5.84	2.01	16.96

Hosmer and Lemeshow goodness of fit test
χ^2= 6.55
df= 8
p=.59

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