



**INSTITUTE FOR HISPANIC HEALTH**

# **Critical Disparities in Latino Mental Health: Transforming Research into Action**

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## Acknowledgments

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## **Background**

In 2004, the National Council of La Raza (NCLR) acquired a grant from Eli Lilly and Company to better inform the health community of the mental health issues facing Latinos in the United States through the development of a research-informed white paper. In this effort, staff of the NCLR Institute for Hispanic Health (IHH), in collaboration with the newly-formed NCLR/CSULB Center for Latino Community Health, Evaluation, and Leadership Training, met to address this challenge. Based on a thorough review of the literature, in combination with various discussions with leaders in Latino mental health, the collaborative team agreed to focus on six major issues affecting Latino mental health:

- Depression
- Immigration and Acculturation
- Mental Health and Co-Morbidity
- Chemical Use and Dependency
- Domestic Violence
- Suicide

These concepts were developed at the Latino Mental Health Summit held at California State University, Long Beach in February 2005. Leading experts in the aforementioned areas were contacted and asked to present their research and attend topic-specific workgroups of mental health providers to brainstorm and elaborate on the designated issues and their impact on the Latino community throughout the morning of the Summit. In the afternoon, participants were placed in designated workgroups, comprising providers, academics, community-based organization (CBO) staff, and key community member informants, and charged with expanding the information given in the morning presentations, as well as providing recommendations concerning policy, education, and treatment which would result in improved mental health access and status for Latinos throughout the U.S.

The presentations were videotaped and analyzed for content. Each afternoon workgroup discussion was structured with a predetermined outline to guide the dialogue. Workgroups were also audio-recorded, and white board and computer notes were recorded for content analysis and incorporation into the “recommendations” section of this report.

## **Introduction**

In 2000, Latinos became the largest minority group in the United States, constituting more than 38 million. Latinos now make up 13.5% of the U.S. population, with as much as 10% of this number unreported due to low participation in the U.S. Census process and redistricting of highly-populated Latino areas (U.S. Census Bureau 2003, 2004). By the year 2030 it is projected that Latinos will total more than 73 million and compose 20.1% of the U.S. population, making Latinos the fastest-growing racial/ethnic group in the country (U.S. Census Bureau, 2004).

The Latino population in the U.S. is primarily made up of individuals of Mexican descent (66.1%), followed by Central and South Americans (14.5%), Puerto Ricans (9%), Cubans (4%), and other Hispanics/Latinos (6.4%). Latinos vary greatly by country and region of origin, the political and social history of their countries of origin, educational levels, and immigration experience. In addition, Latino households are often mixed; for example, 90% of California's Latino households contain both noncitizens and citizens (California Immigrant Welfare Collaborative, 2005). It is essential that understanding the subpopulation differences in mental health status is promoted and that access issues that Latinos face throughout the U.S. are recognized. The heterogeneity of the Latino community and the need for subpopulation-specific mental health research cannot be understated. Demographers must work with Latino health professionals to research the effects that shifts in Latino immigration patterns during the 1990s have had on the greater dispersal of Latinos in the U.S. States with emerging populations experienced a growth rate of 61% in their foreign-born populations, nearly double the increase in the traditional "big six" immigrant-receiving states – California, New York, Texas, Florida, New Jersey, and Illinois (Fix and Passel, 2001).

Latinos in the U.S. demonstrate distinct ethnic characteristics, acculturation levels, migration patterns, generational status, and occupational, demographic, and language profiles. Although the Latino community represents the largest racial and ethnic minority in the United States, Latinos continue to face a myriad of challenges that affect their quality of life. The most alarming is in the field of health, particularly considering that Latinos often interface with the health care system only when they are ill and in their most vulnerable state. Latinos are faced with many health challenges including increased burden of chronic and infectious diseases and limited access to culturally- and linguistically-relevant health care (National Council of La Raza [NCLR], 2004).

Poor health for the Latino community can be linked to many barriers in the health care system. Literature suggests that language, immigration status, and lack of health insurance are key barriers that prevent many Latinos from accessing health care services and receiving quality health care. Latinos who have limited English proficiency are vulnerable to the challenges of accessing medical care, and they are more likely to have greater difficulties communicating about health problems with a provider (NCLR, 2004). In addition, language barriers prevent Spanish-speaking Latinos from accurately understanding instructions for prescription medicines and written information from a doctor's office. According to The Commonwealth Fund (2003), nearly 50% of Spanish-speaking Latinos had problems communicating with their physicians, and close to 50% also reported difficulty understanding instructions for prescription medicines and understanding written information from a doctor's office, much of which is only provided in English.

Across all age groups, Latinos are substantially more likely than non-Hispanic Whites or African Americans to lack health insurance (The Commonwealth Fund, 2003), and because of their high rates of uninsurance, Latinos are disproportionately at risk for lacking basic access to medical care. Throughout the past decade, one-third or more of all non-elderly Latinos have been uninsured each year, a rate two to three times that of non-Hispanic Whites (U.S. Census Bureau, 2003). Forty percent of Latino adults aged 19 to 64 were uninsured in 2000, compared to 14% of

Whites and 25% of African Americans. Moreover, Latino citizenship and immigration status are directly related to low rates of health access and availability of quality medical care. In 2000, a remarkable 58% of noncitizen Latinos lacked health insurance, double the percentage of U.S.-born or naturalized Latinos (Schur and Feldman, 2001).

As a result of the lack of access to health care in general, much less quality medical care, Latinos continue to disproportionately suffer from major complications due to chronic and infectious diseases. Current data from the Centers for Disease Control and Prevention (CDC) and the National Center for Health Statistics (NCHS) 2002 report that heart disease is the leading cause of death for all Latinos (24%), followed by cancer (20%), unintentional injuries (8%), cerebrovascular disease (6%), and diabetes (5%). Furthermore, a recent Supplement to the Report of the Surgeon General on Mental Health (Department of Health and Human Services, 2001) found that Latinos with diagnosable mental disorders underutilize mental health care. Latinos have recently been identified as a high-risk group for depression, anxiety, and substance abuse (National Alliance for Hispanic Health, 2001).

### **Latinos and Depression**

The most common form of depression among all populations, including Latinos, is major depression. This form of depression is particularly debilitating as it frequently starts early in life with an onset usually prior to age 25. According to the World Health Organization, depression is the leading cause of years of life lived with disability and can result in serious long-term functional impairment. Whereas at one time heart disease was recognized as the foremost cause of disability, depression has taken the lead. According to the World Health Organization, mental disorders represent five of the top ten causes of disability in Canada and the United States among persons 15 to 44 years of age, with depression leading all other illnesses.

Depression often co-occurs with other mental or physical illnesses and can result in increased comorbidity and lost productivity. Depression often leads to a vicious downward cycle of poverty and morbidity, and given Latinos' poor access to culturally- and linguistically-appropriate mental health care, it is not surprising that many never receive treatment for their illness. According to the Hispanic Health and Nutrition Examination Survey (HHANES), the Epidemiological Catchment Area Study (ECA), and the National Co-morbidity Survey (NCS), Latinos are at high risk for depressive episodes within their lifetimes, with the NCS reporting that 17.7% of Latinos will suffer from major depression in their lifetimes (Hough, Landsverk, and Karno, 1987). Data from the Mexican American Prevalence and Services Survey (MAPSS), when compared to eight other sites of the International Consortium of Psychiatric Epidemiology (ICPE) wherein surveys were conducted, demonstrate that Mexican American females and males ranked first and second in likelihood to have reported a major depressive episode within the previous 12 months.

Although people from different cultures express symptoms of depression in various ways, Latinos tend to experience depression in the form of bodily aches and pains (e.g., stomachaches, backaches, or headaches) that persist despite medical treatment. Depression is often described by Latinos as feeling nervous or tired (HealthyPlace, 2004). Other symptoms of depression include changes in sleeping or eating patterns, restlessness or irritability, and difficulty

concentrating or remembering. According to Lopez (2002), it is important to examine the economic and social costs of mental illness to society, systems of care, families, and individuals. The Surgeon General's Call to Action on Suicide (1999) states that the current system of mental health fails to provide for the vast majority of Latinos in need of care and that this failure is especially pronounced for immigrant Latinos, incarcerated Latinos, and Latino youth (Walker, Senger, Villarruel, and Arboleda, 2004).

Latinos are less likely to receive care for depression and are even less likely to receive quality depression care, compared to other racial/ethnic groups (Schoenbaum, Miranda, and Sherbourne, 2004). Among Latinos with a mental disorder, less than one in 11 contacts mental health specialists, while fewer than one in five contacts general health care providers. In addition, among Latino immigrants with mental disorders, fewer than one in 20 uses services from mental health specialists, while less than one in ten uses services from general health care providers (A Report of the Surgeon General, 2001). In a study using the Los Angeles-Epidemiologic Catchment Area Sample, Mexican Americans with mental disorders within six months prior to the research interview reported using both health and mental health services at a lower rate than non-Hispanic Whites (11.1% versus 21.7%, respectively) (Hough, Landsverk, and Karno, 1987). Similarly, in a study conducted in Fresno, California, Mexican Americans with mental health disorders during the past 12 months prior to being interviewed used mental health specialists at a rate of only 8.8% (Vega, Kolody, and Aguilar-Gaxiola, 1999). Furthermore, there is a great problem with recidivism in mental health care with more than 70% of Latinos who do access mental health services not returning after their first visit (Aguilar-Gaxiola, 2005). The underutilization of mental health services coupled with low rates of antidepressant medication use can be attributed to the prevalence of chronic depression among Latinos more than any other group (Aguilar-Gaxiola, 2005).

According to the National Alliance for the Mentally Ill (NAMI) many barriers to care exist for Latinos with mental illnesses. For example, Latinos are twice as likely to seek treatment for mental disorders in non-mental health settings, such as the offices of general health care practitioners or religious organizations. These findings point to the dire need for an improvement in detection and care within the general health care sector. In addition, results from the Mexican American Prevalence and Services Survey (MAPPS) indicate that the most commonly reported barriers to receipt of mental health care services were lack of knowledge of where to seek treatment, lack of proximity to treatment centers, transportation problems, and lack of available Spanish-speaking providers who are culturally- and linguistically-trained to meet the needs of Latinos (Aguilar-Gaxiola, Zelezny, Garcia, Edmonson, Alejo-Garcia, and Vega, 2002).

Moreover, there is a distressing lack of Latinos working as professional mental health providers. A national survey by Williams and Kohout (1999) revealed that out of 596 licensed psychologists with active clinical practices who are members of the American Psychological Association, only 1% of the randomly selected sample identified themselves as Latino. Furthermore, in 1999, the Center for Mental Health Services (CMHS) reported the existence of 20 Latino mental health professionals for every 100,000 Latinos in the United States. Latinos' reluctance to utilize mental health services may best be described by the *dicho* (saying) "*No se lava la ropa es casa ajena*" (One must not wash their dirty clothes in someone else's home). In

other words, problems are handled within the family and should not be discussed or revealed outside of the home. Until Latinos are able to receive care by professionals who represent their population, understand their culture, and speak their language, mental health issues will continue to disproportionately affect the fastest-growing sector of the U.S. population, and the stigma surrounding mental health care will further deter Latinos from accessing services.

According to Lopez (2002), a mental health system that focuses on improving the accessibility and quality of care will help address the considerable need for mental health services in Latino populations. La Roche (2002) suggests that in order for Latinos to receive competent mental health care, providers must apply a three-pronged approach to ameliorating depression rates. A culturally-sensitive psychotherapeutic model for addressing depression among Latinos should address chief complaints and reduce the symptoms of depression. In addition, providers should understand that Latino narratives include different dimensions of past experiences such as trauma, injury, and social isolation, and should foster empowerment in an effort to awaken a social consciousness within Latino mental health patients.

### **Latino Mental Health Issues Related to Immigration and Acculturation**

Mental health issues become particularly distressing in immigrant populations that have left their families and social support systems in their countries of origin. These populations are often further isolated due to lack of health insurance, little or no knowledge of the health care system, lack of Spanish-speaking providers, and low literacy. The process of adaptation to U.S. norms and changing expectations may also result in dissonance between parents and their children, producing a strong effect of disconnection between the parents' aspirations upon immigration and the outcomes of the lives of their offspring (Suro, 1999).

Acculturation can be defined as the process of adapting to a new culture as a result of changes in cultural attitudes, values, and behaviors that come from being in contact with two or more distinct cultures (Barlow, Taylor, and Lambert, 2000). A great deal of evidence exists to confirm the overall negative effects of the acculturation process on mental health status (Searle and Ward, 1990; Stonefeinstein and Ward, 1990; Ward and Kennedy, 1994; Miranda and Umhoefer, 1998). For Latinos, the process of acculturation alters their relationship to the environment, which causes changes in psychological well-being (Rogler, Cortes, and Malgady, 1991).

Acculturation and immigration status have a strong influence on Latino mental health. Higher rates of mental illness are reported among U.S.-born and long-term residents when compared to recent Latino immigrants. In addition, place of birth has a significant correlation with the subsequent risk for most psychiatric disorders. U.S.-born Mexican Americans were found to be twice as likely to report a mental disorder when compared to their immigrant counterparts (Vega, Kolody, and Aguilar-Gaxiola, 1998). Higher rates of affective disorders, anxiety disorders, and chemical use and dependency were found among non-immigrants when compared to immigrants. Furthermore, a recent national study comparing the incidence of mental illness among immigrant Mexicans and Whites in comparison to their non-immigrant counterparts demonstrated that the immigrants, regardless of ethnicity, experienced fewer mental health disorders (Grant, Stinson, Hasin, Dawson, Chou, and Anderson, 2004).

Among Latinos from various countries, similar mental health status is seen as they become more acculturated through the process of adaptation to, and survival within, the U.S. Studies point to few exceptions to the decline in mental health status that occurs among Latinos as they acculturate. The only subpopulation that has not shown the dramatic increases in mental health issues when comparing immigrants and U.S.-born has been Cuban Americans in South Florida (Turner and Gil, 2002). This phenomenon could be the result of the strong socioeconomic and political base Cubans have developed in South Florida.

Younger Latinos of second and subsequent generations appear to experience less acculturative stress than older, first-generation Latinos (Miranda and Matheny, 2000). For Latinos, initial signs and symptoms of acculturative stress may include negative psychological consequences such as emotional distress, shock, and anxiety. Berry (1990) noted that immigrants experienced various levels of acculturative stress and that elevated levels of this stress are likely to result in increased levels of depression and suicidal ideation (Hovey and Magaña, 2002). For Latinos, an imbalance between perceived demands and perceived resources upon immigration to the U.S. may prove to increase mental health instability. This is often exacerbated due to the lack of health and human resources available to Latinos overall, particularly those of a culturally- and linguistically-relevant nature.

Latinos' experience of acculturative stress has often been associated with fatalistic thinking (Ross, Mirowsky, and Cockerham, 1983). Many experience decreased self-efficacy expectations, depression, and low social interest (Miranda, 1995). In addition, recent immigrants experience acculturative stress related to changes in lifestyle, environment, and altered social support, which are associated with increased risk of obesity, diabetes, and cardiovascular disease (Gonzalez, Haan, and Hinton, 2001). Acculturative stress, and stress experienced upon immigration to the U.S., has a pervasive, lifelong influence on Latinos' psychological adjustment, decision-making abilities, occupational functioning, and overall physical and mental health (Smart and Smart, 1995). Moreover, the majority of Latinos expressing acculturative stress, and stress related to immigration, are influenced by many other factors including language barriers, deficits in coping resources, lack of cohesion with family members, and the short tenure of U.S. residency (Miranda and Matheny, 2000). Although not all Latinos develop depression upon immigration to the U.S., it is likely that a certain degree of biological or psychological vulnerability, combined with social vulnerability after immigration, may lead to a sense of depression (Bhugra, 2003). Changes in cultural identity may subsequently lead Latinos to suffer from culture shock. Furthermore, cultural distance may contribute to a sense of alienation and isolation, thereby leading to depression and acculturative stress (Bhugra, 2003). Cultural distance can become increasingly problematic when immigrant parents sense a loss of connection with their more acculturated children. This can be exacerbated further when subsequent generations are not able to communicate effectively with their relatives due to both linguistic and cultural barriers.

Latino mental health is also influenced by additional stressors such as refugee or undocumented status, experiencing the threat of or having previous history with deportation, and isolation in the absence of family or social support (Ramos and Carlson, 2004). With immigration to the U.S. at



an all-time high, Latino families and their children strive to assimilate and adopt to American culture, and the influence that these processes have on their mental and emotional health are marked. Many Latino immigrants perceive the process of immigration to the U.S. as a traumatic experience that negatively affects their self-esteem and overall sense of identity (Harker, 2001). As the number of immigrant children continues to increase in the U.S., their adaptation merits much attention. Although most research concerning recent immigrants has focused on adults, very little data are available to accurately describe young immigrant children and their adaptation to U.S. mainstream culture (Harker, 2001). Latino children often serve the role of cultural brokers for their families and are often left to translate when accessing the health care system. Although health care agencies are required to provide translation for all individuals seeking care under Title IX, the reality is that translators are not always available in times of need, particularly within emerging communities experiencing rapid demographic changes. Furthermore, Latino children are more likely than any other racial and ethnic group to live in poverty and lack health insurance and access (U.S. Bureau of the Census, 2004). Due to the lack of regular interface with health providers, Latinos have little knowledge of their health care rights and what to expect in contemporary U.S. health care settings. Furthermore, due to many academic barriers, Latino children and youth experience poor and overcrowded schools and insufficient levels of education, resulting in decreased opportunities for employment that provide access to and understanding of the health care system while contributing to high-risk behaviors that may contribute to poor mental health (Vega and Alegria, 2001).

When acculturation is interpreted as a unidimensional and unidirectional process, it more accurately resembles assimilation, wherein the immigrant is expected to gradually relinquish his/her cultural mores and to adopt those of the country of residence. Aforementioned data, however, definitely indicate the negative effects of acculturation on the mental health status of Latinos. Furthermore, an increasing number of studies strongly indicate the positive mental health effects of biculturality as perhaps the ideal acculturative stage due to the fact that bicultural Latinos are less likely to be depressed and more likely to demonstrate high social interest (Miranda and Umhoefer, 1998; Berry, 1990; Lang, Muñoz, Bernal, and Sorensen, 1982). Due to the fact that increased acculturation has been shown to be harmful to many other health indices, it is essential to evaluate the positive attributes of various Latino cultures. The knowledge gained through this evaluation should then be incorporated into educational and programmatic efforts to educate Latino families and to encourage the retention of the cultural characteristics and behaviors that have shown to have protective qualities that guard against morbidity, while encouraging Latino immigrants to acquire the bicultural skills needed to effectively adapt to the host culture.

### **Latinos and Chemical Use and Dependency**

One of the most harmful consequences of poor mental health occurs when individuals are prone to excessive alcohol and illicit drug use. Cultural dissonance and acculturative stress, discrimination, socioeconomic pressures, loss of social support mechanisms upon immigration, and exposure to drugs and alcohol often lead to chemical use and dependency.

Substance abuse is the most common and clinically significant co-morbidity among people with mental health illnesses (Drake, Mueser, Brunette, and McHugo, 2004). Death rates linked to alcohol-related conditions like cirrhosis and chronic liver disease are exceptionally high among Latinos (Caetano and Galvan, 2001). Nationwide, chronic liver disease and cirrhosis of the liver are the seventh leading cause of death among Latinos (CDC, MMWR, 2004), while they are not listed in the ten leading causes of death for African Americans and Whites. Latino youth are found to have more likely consumed alcohol prior to driving or ridden with a driver who has consumed alcohol than both African American and Anglo youth (Caetano and Galvan, 2001). Moreover, deaths related to alcohol consumption while driving, riding in a care with a driver who has consumed alcohol, and/or alcohol-related homicide are higher among Latinos, compared to their African American and White counterparts (Crowley, 2003).

Alcohol and tobacco companies have long been accused of having a negative influence on Latinos' drinking patterns and are often sponsors of traditional celebrations in the Latino community. Alcohol use is expected at all celebrations and family gatherings and it is condoned by cultural norms. Due to widespread use, Latinos are often unlikely to view excessive alcohol use as problematic and do not associate alcohol with drug use. Recent prevalence estimates suggest that alcohol use and dependency are higher among Mexican-origin men when compared to women (Vega, Scribney, and Achara-Abrahams, 2003). Men of Mexican origin have been found to be disproportionately affected by alcohol-related diseases and alcohol-related deaths. Furthermore, research demonstrates that Latino males are more likely to affirm the statement "it is good to get drunk once in a while" (Caetano and Clark, 1999). As Hispanic women acculturate to U.S. norms and values, they are more likely to consume alcohol.

According to the Youth Risk Behavior Surveillance Report (1999) Latino youth were more likely to have consumed alcohol in their lifetimes, to report current use of alcohol, and to report episodic heavy drinking when compared to their Anglo and African American counterparts (Caetano and Galvan, 2001). Several studies have identified predictors of drinking among Latino youth (Sokol-Katz and Ulbrich, 1992) and stipulate that males and older adolescents consume significantly more alcohol than females and younger adolescents. In addition, a higher level of alcohol consumption tends to be reported more by Mexican adolescents living in single-parent homes than those in two-parent homes. Data from the Hispanic Health and Nutrition Examination Survey (HHANES), a national probability sample of Hispanics aged 12 to 74 conducted during 1982 through 1984, allude that patterns of substance use may differ significantly among major Hispanic subgroups. Mexican Americans and Puerto Ricans were more likely to be past or present drug users than were Cuban Americans. For example, 42% of Mexican Americans and 43% of Puerto Ricans, but only 20% of Cuban Americans, reported having ever used marijuana in their lifetimes (USDHHS, SAMHSA, 2003). Moreover, analyses of HHANES demonstrated that acculturation into mainstream U.S. society may contribute to chemical use and dependency. Hispanics who preferred to be interviewed in English were two to three times as likely to have ever used drugs when compared to their Latino counterparts who preferred to be interviewed in Spanish. Among Hispanics who reported ever having used marijuana, Mexican Americans initiated use at earlier ages than Puerto Ricans. Given the positive association between the initiation of drug use and school drop out, further studies are

needed to better understand the link between drug use and potential dropout for each subgroup of Latinos (Chavez, Oetting, and Swaim, 1994).

According to estimates by the U.S. Department of Justice (1997), the lifetime probability of being incarcerated in a state or federal prison is four times higher for Latino males than White males. Moreover, in 2000, Latinos constituted 43.4% of all federal drug offenders. As a group, Latinos in federal prison were the most likely to be convicted of a drug offense (NCLR, 2002). Although marijuana and illicit drug use are lower for Latinos when compared to African Americans and Whites, small increases in marijuana use among Latinos occur (Gil and Vega, 2001). Overall use rates appear to be influenced by the dramatic rise in marijuana and cocaine use among Latino youth. Data from the *Monitoring the Future Study* indicate that Latino youth are more likely to have used marijuana and cocaine in the tenth grade than their African American and White counterparts (Johnston, O'Malley, and Bachman, 1999).

Current literature and anecdotal data consisting of in-depth interviews and focus groups stipulate that methamphetamine use among Latinos, especially among Mexican migrant construction workers, food service workers, and agriculture workers, is on the rise (DHHS, 2000). From 1992 to 2002, according to the DASIS Report (2004) the proportion of primary methamphetamine admissions involving those who identified themselves as Latinos (especially Mexican) increased from 6% in 1992 to 12% in 2002. Findings showed that participants believed that methamphetamine use was on the rise among Mexican American workers in all occupations (DHHS, 2000). Study participants often reported that their first use occurred in an occupational setting. Often referred to as the "poor man's cocaine," most respondents stated that they had easy access to the drug and that price was not a barrier for them. Interviewees also reported that dealers often travel to work sites, including agricultural fields. Overall, methamphetamine use has enabled many to work longer hours faster and therefore make more money. Dramatic increases in use among Latinos in and around the U.S.-Mexico border can also be attributed to the high numbers of *maquilladora* workers, who often put the drug in their soft drinks to help them perform repetitive precision tasks for 12-hour shifts with alertness and accuracy. According to Lopez-Zetina (2004), among Latino users in San Diego and Tijuana, the drug most widely used is methamphetamine. In San Diego, most users are likely to have had the habit for seven years or longer and have initiated use at or around the age of 17. Sixty-five percent of San Diego Latino methamphetamine users report daily consumption. In Tijuana, where 28% of users consume daily, most are likely to have used for 12 years or longer and initiated use at the approximate age of 14. Due to the relative ease with which methamphetamine is produced, increasing restrictions have been made on the sale of Sudafed and other components used in its manufacture. These restrictions, however, have not been instigated in Mexico, resulting in the creation of methamphetamine manufacturers along the U.S.-Mexican border.

### **Latinas and Domestic Violence**

Although certainly not the only contributing factor, alcohol and illicit drug use often lead to domestic violence within the Latino community. Domestic violence is a serious, widespread social problem with mental health consequences for victimized women and families of all cultural and ethnic groups. Medical providers, clinicians, and policy-makers have become aware

of the widespread prevalence of domestic violence, as evidenced by the increasing number of screening programs in emergency departments, as well as primary care, obstetric, and pediatric facilities throughout the U.S., and in the passage of the Violence Against Women Act in 1994 (Dienemann, Boyle, Baker, Resnick, Wiederhorn, and Campbell, 2000).

Victims of domestic violence, who are overwhelmingly women, are at a high risk for mental health problems (Carlson and McNutt, 1998). According to the American Medical Association (2001), battered and victimized women account for 22% to 35% of all women seeking emergency medical services, 25% of women who attempt suicide, and 23% of pregnant women who seek prenatal care (Torres and Han, 2003). Although much work has been attributed to recognizing the impact that domestic violence has on women overall, few reliable data are available to describe the increasing crisis of domestic violence experienced by Latinas.

Despite various data inconsistencies related to the prevalence of domestic violence among Latinas, it is apparent that a substantial number of Latina women are violently victimized within their intimate partner relationships (Ramos and Carlson, 2004). Several risk factors may be responsible for Latinas and domestic violence. Victimized Latina women may be younger, have lower socioeconomic status including limited personal resources, and lower levels of education. In addition, male partners' heavy drinking, generalized violence, a previous history of arrest, and related occupational stress may place Latinas at higher risk for domestic violence (Caetano, Schafer, Clark, Cunradi, and Rasberry, 2000). Cultural factors associated with religious practices, fatalistic beliefs, and familial norms that reinforce a patriarchal structure and sanction domestic violence greatly influence the ways in which Latina women define, perceive, and respond to domestic violence when they are directly affected (Morash, Bui, and Santiago, 2000). Furthermore, Latina women have been found to engage in violent behaviors toward their male partners.

Male and female cultural scripts that deny a woman's participation in the workforce and in decision-making often interact with the social forces of oppression, prejudice, and discrimination, thus increasing the likelihood for Latinas to experience the adverse effects of violence in their personal relationships (Vega, 1995). Existing community attitudes and norms often prevent Latinas from acknowledging the violence in their lives, sharing it with friends and family members, and seeking help from the limited resources available (Krishnan, Hilbert, and VanLeeuwen, 2001). Attitudes and norms about family privacy often result in feelings of hopelessness. Therefore, Latinas refrain from disclosing their experience of abuse and speaking against their male partners to friends, in the court systems, to counselors, or other health care providers. Overlapping issues such as the lack of legal documentation and fear of deportation also exacerbate the humiliating experience of Latinas in abusive relationships.

Data from the National Couples Study indicate that Latinos are more likely to have engaged in male-to-female partner violence than Whites and that more than 25% of Latinos and Whites reported having engaged in drinking prior to the violent episode. Latino males were also more likely to have experienced female-to-male partner violence, and between 25% and 33% of men reported having drunk alcohol when their partners became violent (Caetano and Galvan, 2001).

Latinas were much less likely than their White female counterparts to have consumed alcohol at the time they became violent.

A myriad of immigrant-specific factors aggravate the already vulnerable position of Latina women in situations wherein domestic violence occurs (Menjívar and Salcido, 2002). One major factor is the language barrier that many Latinas experience, which limits their ability to seek help from an abusive partner. Upon immigration to the U.S., many Latinas with limited host-language skills have inadequate alternatives to living with their abusers, thus further limiting Latinas' access to care. In addition, stigma often related to non-English-speaking Latinas further hinders Latinas' ability to feel support from medical professionals or civic authorities. Ferraro (1983) found that police officers viewed arrests in domestic violence situations among immigrants as a waste of time because violence was interpreted as being an expected part of the Latino lifestyle.

A binational study of domestic violence experiences in Northern California and Jalisco, Mexico found high levels of verbal abuse and moderate occurrence of physical violence. Women were found to use verbal abuse as a way to be heard and respected. Moreover, husbands' migration experiences tended to be related to economics, alcohol use, and a lack of communication in the relationship. Another study that compared women from rural Mexico whose husbands had traveled to the U.S. for work with those who had not found that women whose husbands did not live regularly in Mexico experienced increased levels of depression, aggression toward their male partners, and relationship dissonance when their husbands visited Mexico (Flores, 2005). This study showed that intimate partner violence (IPV) existed on both sides of the border and that it was defined differently among Latinos than Whites. For example, accusation of being a "bad mother or wife" was viewed as one of the most severe abuses. Among Latino males, the most severe form of abuse was to be called "useless." Both of these items were not included on the violence scales that measured experience of violence, indicating a need to develop culturally-appropriate scales for IPV among Latinos. Both women and men were found to use verbal insults, as well as physical abuse, such as breaking valued items, pushing, and hitting, as a way to be heard and respected. Violence was often experienced as a way in which women could negotiate a space for dialogue and potential resolution of problems. For these reasons it is essential that a thorough investigation be conducted regarding the ways violence becomes part of the daily lives and interactions within Latino families among both immigrants and non-immigrants. In addition, the high rate of depression and isolation among Latinas who had and had not experienced violence indicates that depression is rampant among Latinas on both sides of the border. These findings also indicate a clearer understanding of relational expectations of what it means to be married. Conflict resolution in marriage is fundamental if we are to effectively prevent IPV (Flores, 2005).

The impact that domestic violence has on the mental health of Latinas has not been systematically examined, though side effects of being a victim of domestic violence have been associated with negative mental health outcomes including depression and suicide attempts, post-traumatic stress disorder, varying forms of anxiety, substance abuse, insomnia, and social dysfunction – with physical violence having stronger effects than psychological abuse (Carlson, McNutt, and Choi, 2003; Campbell, 2002). According to Flores-Ortiz (1998), many Latina

participants reported encountering providers who focused only on physiological problems and ignored their social and psychological problems, thus leading to a neglect of treatment of their abuse. McGrath and colleagues (1990) stipulate that the compromised state of mental health among victimized Latina women may be mediated by ethnocultural factors. For example, depression among Latina women is likely to be compounded by lower income and educational status as well as unemployment. Furthermore, Latinas whose husbands are working in the U.S. are more likely to report higher levels of depression.

Cultural and gender expectations also contribute to an environment wherein domestic violence often remains hidden and untreated. Due to the fact that the male is viewed as the decision-maker and the provider, and the female's role is often relegated to duties of the home and children, few opportunities exist for women to become educated and/or trained to enter the workforce. When Latinas do enter the workforce, however, they often fare better than their male partners, thus increasing the sense of displacement and insecurity of a Latino male who interprets his role as being usurped by his female partner. The impact of the economic disenfranchisement, combined with discrimination and lack of support, often leads to domestic violence as the Latino male may feel emasculated and unproductive. It is essential that research and programmatic attempts to ameliorate domestic violence within Latino relationships understand the ways in which "gendered opportunity structures" impact not only the health outcomes under study, but also equality within the Latino household (Hirsch, 2003, p.278).

### **Latinos and Suicide**

Awareness of suicide incidence in the Latino community is growing. Latino youth (especially adolescent Latinas) and the elderly appear to be at a significantly increased risk of suicide when compared to other Latinos. This is particularly distressing as the adaptation of suicidal ideation and subsequent behaviors interrupt key developmental stages, which can be difficult to regain. Suicide among Latino elderly is often the result of perceived inutility, lack of social support, or reaction to exacerbation of a chronic illness, such as recovery from an amputation resulting from diabetes.

Adolescence is a time of transition with a focus on the developing independence from parents and the formation of supportive links with peers and other adults. Stress-related problems may become more common and an increase in depression, suicidal ideation, and suicide are often observed during this stage of life (Schichor and Bernstein, 1994). Suicide is now the eleventh leading cause of death for all ages and the third leading cause of death for adolescents (Cabassa, 2005). Suicide was found to be the third leading cause of death among young Latinos (age 10-24 years old) and the seventh leading cause of potential life years lost before age 75 years (CDC, MMWR, 2004). Kann et al. (1998) found that Latinos were more likely to have attempted suicide (10.7%) when compared to their African American (7.3%) and non-Hispanic White (6.3%) counterparts. The same study found that Latinos were more likely to consider suicide (23.1%, vs. 15.4% and 19.5%) and make a specific plan (19.6%, vs. 12.5% and 14.3%) when compared to their African American and non-Latino White counterparts, respectively. According to estimates by the U.S. Census Bureau (2000), ethnic minorities constitute almost 30% of the total U.S. population and even greater numbers among youths under the age of 18

(Johnson-Powell, Yamamoto, Wyatt, and Arroyo, 1997). Each year in the U.S., approximately 30,000 people die by suicide and approximately 650,000 people receive emergency treatment after attempting suicide (CDC, 2004). More than 80 million people in the United States are at risk for suicide due to mental illness and substance-use disorders. It is the third leading cause of death among American youth and the eleventh for Americans of all ages.

Data from the Youth Behavior Risk Surveillance (2003) indicate that within the past 12 months 8.5% of students in grades 9 through 12 have attempted suicide, 16.9% had seriously contemplated suicide, 16.5% had made a suicide plan, and 2.9% attempted suicide and required medical attention (CDC, 2004). When comparing the Latinos, African Americans, and Whites, Hispanic adolescent females had much higher rates of suicide ideation, attempted suicide, and required medical attention due to the attempt. Data from the National Household Survey on Drug Abuse demonstrate that Latinas aged 12 to 17 were at higher risk for suicide than other youths, with Latinas born in the U.S. at the highest risk (2000). These findings confirm those of previous studies that showed that U.S.-born students are almost twice as likely to have experienced suicidal ideation in the previous week when compared to their Mexican-born counterparts (Swanson, Linskey, Quintero-Salinas, Pumariega, and Holzer, 1992).

Although the rates of mental illnesses in the Latino community appear to be fairly similar to Whites, this could be due to severe underreporting, at least partially caused by lack of health insurance and access to culturally- and linguistically-appropriate mental health services. According to the CDC, Latino youth experience disproportionately high rates of anxiety-related and delinquent behaviors, depression, and drug use when compared to non-Latino White youth (CDC, 2004). Furthermore, approximately one-third of Latina girls seriously contemplate suicide (SAMHSA, 2001).

According to the CDC during 1997-2001, among a total of 8,744 Latinos who died from suicide, 7,439 were males (MMWR, 2004). Approximately 50% of all suicides occurred among Latinos aged 10-34 years. For Latinas, rates were highest among those aged 50-54 years, followed by those aged 45-49 years and those aged 15-19. Persons of Mexican origin accounted for the majority of suicides (56%), followed by persons of other/unknown Hispanic origin (14%), Central and South Americans (11%), Puerto Ricans (11%), and Cubans (8%).

An additional study of a more limited timeframe found that from 1999 to 2001, a total of 5,332 Latinos died from suicide, 85% of whom were males. The suicide method most frequently used was firearms (45%), followed by suffocation (34%) and poisoning (7%). In contrast, Latino females were more likely to use firearms (29%), suffocation (29%), and poisoning (27%) almost equally. Among Latino male youths aged 10-24 years (n=1,135), firearms accounted for 52% of all suicides, followed by suffocation (38%) and poisoning (3%); whereas among females in the same age group (n=211), suffocation accounted for 44% of all suicides, followed by firearms (33%) and poisoning (11%) (CDC, 2004).

Risk factors for suicidal behaviors among Latino youths (male and female) are complex and multifaceted. According to Zayas et al. (2000), to deepen understandings of the phenomena of adolescent Hispanic female suicide attempts and to better inform clinical practice, new culturally-based models need to be developed and tested. In fact, conceptual models for understanding ethnic and racial minority groups frequently neglect the ecological circumstances

underlying social and mental health problems and instead point to individual and family sources of problems (Zayas, Kaplan, Turner, Romano, and Gonzalez-Ramos, 2000). Major depression has consistently been the most prevalent condition leading to suicidal ideation and contemplation among Latino youth. Youth suicide is marked by a distinct gender difference; although females are more likely than males to attempt suicide, males are more likely to commit suicide (Otsuki, 2002). Latinas are more likely to be hospitalized for self-inflicted injuries. Substance abuse is also a significant risk factor, especially for older adolescent males (Gould and Kramer, 2001). A noteworthy factor appears to be the high level of mental distress reported by Latino youth. Among respondents to the 2003 Youth Risk Behavior Survey, 35.4% of Latino youth and 28.6% of all respondents stated that within the preceding year they had felt so sad or hopeless almost every day for two weeks or more that they stopped doing some usual activities (CDC, MMWR, 2004).

Models emphasizing family function appear to provide the most accurate framework with which to understand Latino adolescent suicide. An increased understanding of the ways in which culture and cultural traditions, adolescent development, and family functioning impact emotional vulnerability and thus suicide behaviors is essential. It is also important to remain both cognizant and vigilant regarding gender expectations of Latino vs. Latina adolescents, particularly among families with strong traditional gender expectations. In addition, we must evaluate the impact of educational initiatives that emphasize rudimentary memorization and high-pressure academic testing as opposed to critical thinking and problem-solving strategies. Many educators and psychosocial service providers firmly believe that the recent increase in academic expectations are not developmentally appropriate and result in increased and unnecessary stress among youth. These changes, combined with decreased parental time resulting from increases in work schedules for economic survival, often result in inconsistent parenting and lack of parental-child interaction.

### **Depression and Co-Morbidity Issues**

Many health problems, such as diabetes and HIV/AIDS, disproportionately affect the Latino community. When mental health illness is coupled with other leading causes of death among Latino men and women, issues related to co-morbidity become marked and Latinos lacking health care find themselves in even more precarious positions. In addition, many Latinos present with co-morbid symptoms, which makes diagnosis very difficult. General concerns center on accessibility to quality services, the affordability of those services, and the cultural and linguistic adequacy of the services made available and of the ability of providers to understand the Latino-specific issues confronting members of that community (Soto, 2000). It is essential that research be conducted on the mental health effects of illnesses that disproportionately impact Latinos, such as HIV/AIDS and diabetes, as well as improving our understanding of the ways that mental health issues further complicate disease-specific states. Furthermore, depression is an independent predictor of cardiovascular disease (CVD) and results in greater morbidity and earlier mortality in persons with CVD (Ferketich, Schwartzbaum, Frid, and Moeschberger 2000; Bush, Ziegelstein, Tayback, Richter, Stevens, and Zahalsky, 2001).

Diabetes is a serious disorder that afflicts an estimated two million or 8.2% of all Latinos aged 20 years or older (American Diabetes Association, 2004). One-third of older Latinos are



diabetic, and the risk of depression among diabetics is 30% higher when compared to their nondiabetic counterparts (Gonzalez, 2005). Several studies suggest that diabetes doubles the risk of depression compared to those without the disorder (Anderson, Lustman, Clouse, de Groot, and Freedland, 2000). The combination of diabetes and depression is most common among older Mexican Americans. Furthermore, although the causes underlying the association between depression and diabetes are unclear, the chances of becoming depressed increase as diabetes complications worsen. Depression may develop because of stress but also from the metabolic effects of diabetes on the brain or from issues of immobility or other “vegetative symptoms.” Studies suggest that people with diabetes who have a history of depression are more likely to develop diabetic complications than those without depression. Latinos experiencing the co-morbid state of depression and diabetes are more likely to experience higher resting glucose levels, are less likely to see a physician and practice routine self-glucose monitoring, and are more likely to report severe depressive symptomology and problems with Activities of Daily Living (ADLs). In addition, Latino diabetics with co-morbid depressive symptomology are also more likely to experience stroke, kidney disease, heart attacks, and amputations. As further impairment occurs due to co-morbid exacerbation without adequate treatment, Latinos become at greater risk for memory loss and an inability to function independently, thus increasing risk of institutionalization (Gonzalez, 2005). Moreover, Alexopoulos et al. (2001) found that less than 15% of diabetics with depression are treated medicinally with anti-depressants and only 8.3% are treated and monitored adequately. Given the high rate of gestational diabetes among pregnant Latinas, screening for postpartum depression must become a routine part of perinatal care. Among Latino adults, cancer is the second leading cause of death, following cardiovascular disease (CDC, 2003). In addition, AIDS is now the second leading cause of death among Latinos between the ages of 25 and 44 (CDC, 2004). Although the decline in U.S. AIDS cases from 1993 to 2001 has been marked, it has been slower among Latinos (56%) when compared to Anglos (73%). Recent data indicate that HIV is increasing faster among Latinos than any other group. From 1999 to 2002, rates of new infections among Latinos increased by 26.2% (CDC MMWR, 2003). What is especially disconcerting is that the 31 states included in the HIV Surveillance Report do not contain data regarding new HIV infections from six of the top ten states known to have the most Latino AIDS cases, including California.

HIV infection among Latinos is significantly underreported. Many HIV-positive Latinos do not perceive themselves to be at risk because they do not inject drugs or self-identify as gay/bisexual. Hence, they are unlikely to be tested until they become aware of the HIV status of a partner or begin to experience symptoms themselves (Rios-Ellis, Leon, Trujillo, Enguidanos, Dwyer, Ugarte, and Roman, 2003). Nationally, 65% of HIV-positive Latinos were diagnosed with AIDS within 12 months of learning of their HIV seropositivity. Furthermore, women represent a growing share of AIDS cases among Hispanics. In 2001, 23% of AIDS cases among Latinos were women compared to 15% in 1991 (KFF, 2003).

Diabetes, particular cancers, and HIV/AIDS are just three of the most common health issues Latinos faces. In an effort to accurately address the mental health problems in the Latino community, it is essential that health care providers understand the impact of co-morbidity on mental health, particularly due to the historical underutilization of mental health services and lack of access to culturally- and linguistically-appropriate health care.

## **Barriers to Care**

According to the National Alliance for the Mentally Ill (NAMI) many barriers to health care exist for Latinos with mental illnesses. For example, Latinos are twice as likely to seek treatment for mental disorders in non-mental health settings, such as the offices of general health care practitioners or religious organizations. These findings point to the dire need to improve detection and care within the general health care sector. In addition, results from a population-based epidemiologic study – the Mexican American Prevalence and Services Survey (MAPPS) – indicate that the most commonly reported barriers to receipt of mental health care services were lack of knowledge of where to seek treatment, lack of proximity to treatment centers, transportation problems, and lack of available Spanish-speaking providers who are culturally and linguistically trained to meet the needs of Latinos (Aguilar-Gaxiola, Zelezny, Garcia, Edmonson, Alejo-Garcia, and Vega, 2002).

Moreover, there is a distressing lack of Latinos working as professional mental health providers. A national survey by Williams and Kohout (1999) revealed that out of 596 licensed psychologists with active clinical practices who are members of the American Psychological Association, only 1% of the randomly selected sample identified themselves as Latino. Furthermore, in 1999 the Center for Mental Health Services (CMHS) reported the existence of 20 Latino mental health professionals for every 100,000 Latinos in the United States. The lack of Latino mental health providers serves as a barrier to care on multiple levels. Principally, Latinos are more reluctant to seek out care when it is not provided by someone who shares their language and cultural understanding and also because the dearth of providers does not allow leadership and program development specific to the mental health needs of Latinos. Furthermore, the shortage of Latino providers contributes to the deficiency of role models in the mental health professions.

The stigma related to Latinos' reluctance to utilize mental health services may best be described by the *dicho* (saying) “*No se lava la ropa es casa ajena*” (One mustn't wash their dirty clothes in someone else's home). In other words, problems are expected to be handled within the family and should not be discussed or revealed outside of the home. Until Latinos are able to receive care by Latino or Latino-sensitive professionals, mental health issues will continue to disproportionately affect the fastest-growing sector of the U.S. population. Additionally, the stigma that surrounds mental health illness, combined with institutional barriers to services, will further deter Latinos from accessing care.

## **The Cost of Neglect**

Beyond the sheer human cost of enduring mental health disparities, the economic cost of neglect must be examined. Major depression frequently starts early in life, tends to run a chronic course, and produces substantial disability throughout the lifespan (Aguilar-Gaxiola, 2005). According to the World Health Organization (WHO), depression is the leading cause of lives lived with disability. In the U.S., unipolar depression is the major cause of disability for persons aged 25-44 (WHO World Health Report, 2001 in Aguilar-Gaxiola, 2005). According to the WHO World

Mental Health Survey Consortium, consisting of extensive epidemiologic surveys conducted in six less-developed and eight developed nations, the U.S. experienced the highest incidence of mental illness with 26.4% of the population reporting anxiety, mood, impulse control, or a substance-related mental health disorder within the past 12 months (2004). The cost of depression in the U.S. is estimated to be \$43 billion, \$17 billion of which represents lost work days (American College of Occupational and Environmental Medicine, 2002). Domestic violence is estimated to cost employers \$4.1 billion in direct costs as well as \$1.8 billion due to lost productivity (American Institute on Domestic Violence, 2001). According to the National Strategy for Suicide Prevention (NSSP), a collaborative effort of the U.S. Department of Health and Human Services agencies, suicide costs in 1998 were estimated to total \$15.6 billion (2000).

Repeated research efforts demonstrate that providing quality mental health services to Latinos would result in considerable savings of county, state, and federal funds (Aguilar-Gaxiola, Zelezny, Garcia, Edmondson, Alejo-Garcia and Vega, 2002). In addition, Latinos with depression have been proven to respond better to psychotherapy-based programs when compared to medication-based treatment. Data demonstrated that the estimated cost per quality-adjusted life year (QALY) for Latinos was \$6,100 or less under psychotherapy compared to \$90,000 or more for medication-based management (Schoenbaum, Miranda, Sherbourne, Duan, and Wells (2004). This research clearly demonstrates the costs associated with a one-size-fits-all mental health treatment approach. Culturally- and linguistically-relevant program methodologies will not only save in the human costs and impairment associated with mental illness, but will also save tax and program dollars through effective treatment.

### **Recommendations**

Given the multiple issues facing Latino populations regarding mental health, multifaceted strategies involving a comprehensive agenda impacting health and human services, as well as educational sectors, are essential. According to Dr. Steven Lopez (2005), “We should push ourselves to go beyond global measures and concepts. Instead, examine how the specific social worlds of our diverse people are related to the full range of mental health outcomes of Latinos.”

### **Health Care and Continuing Education**

According to Lopez (2002), a mental health system that focuses on improving the accessibility and quality of care will help address the considerable need for mental health services in Latino populations. La Roche (2002) suggests that in order for Latinos to receive competent mental health care, providers must apply a three-pronged approach to ameliorating depression rates. A culturally-sensitive psychotherapeutic model that addresses depression among Latinos should address chief complaints and reduce the symptoms of depression. In addition, providers should understand that Latino narratives include different dimensions of past experiences such as trauma, injury, and social isolation, and should foster empowerment in an effort to awaken a social consciousness within Latino mental health patients. Furthermore, programs and models that include a life course approach will enable practitioners and organizations to understand the cumulative effects of resource disparities, racism, and other hardships that impact the mental health of Latinos (Gonzalez, 2005).

Since Latinos are more likely to see primary care providers rather than mental health specialists, it is essential that physicians, nurses, nurses' assistants, and other front-line staff be trained in the presentation of mental health symptoms within the Latino community. Observance of unresolved somatic symptoms, such as backaches, headaches, and other ill-defined or indeterminate pain-related complaints should be interpreted as warranting evaluation for mental health issues. Furthermore, providers should routinely screen their diabetic and cardiovascular disease patients for mental health problems, recognizing that a patient with compromised mental health status is less likely to adhere to a medical treatment regimen. Due to the chronic and long-term nature of depression, in addition to its extensive prevalence among Latino youth, it is essential that strategies be constructed within the educational and social institutions that serve our young. School psychologists, counselors, and religious leaders must be educated regarding the high prevalence of depression and learn to recognize symptoms. The development of referral systems within community-based organizations serving the needs of Latinos can be formed to facilitate easy access to diagnosis and treatment.

In addition, providers need to be given the opportunity to engage in Latino-specific mental health training to remain abreast of research and programmatic strategies. This training must include linguistic components to educate providers regarding commonly used Spanish mental health-related terms and their contextual meaning, such as "*susto*," "*ansiedad*," and "*ataques de nervios*," to ensure accurate diagnosis and treatment. Diagnostic instruments currently utilized such as the Center for Epidemiologic Studies Depression Scale (CESD) need to be analyzed and assessed for cultural relevance as many of the measurement items do not translate appropriately into Spanish. In addition, items that have particular relevance to Latinos, such as those discussed previously in the domestic violence section, need to be added to existing instruments.

Providers must also be educated regarding the cultural appropriateness of family-centered treatment and care models for the majority of Latinos. Often the involvement of a family member is discouraged or interpreted as codependence under traditional Western models of mental health services. This is of particular importance given the phenomenon of increased mental illness upon acculturation. The lack of social support, racism, and isolation experienced within mainstream U.S. culture are often contributing factors to mental health problems among Latinos. It is widely agreed that treating the individual does little to alter the environment wherein the mental health problem originated and, given the potential for strong family support, participation should be encouraged.

It is also essential that providers are cognizant of the stigma associated with mental health illness in the Latino community. To facilitate patient adherence to mental health treatment, health care systems must allow time for providers to explain the importance of treatment and develop *confianza* (trust) between the patient and the provider. In addition, the patient should be provided with an overview of mental health disease prevalence so as not to feel further isolated and fearful of unhealthy mental status. Furthermore, linguistically-appropriate support groups can be established to reduce feelings of stigma and isolation, increase adherence to treatment, and facilitate successful low-cost mechanisms to manage mental illness.

There is a critical need for an increased number of culturally- and linguistically-relevant Spanish-speaking mental health providers at all levels of mental health care. Latinos and Latino-sensitive professionals are needed in social work, psychiatry, psychology, mental health nursing, and counseling, including that of an educational nature. Considering that so few Latinos currently occupy provider positions, it is essential that a community link is developed to ensure that individuals with mental health needs are educated and subsequently transitioned into care and treatment. One of the most effective strategies to diminish the stigma related to mental health problems and facilitate access to care is to train community lay educators in mental health. These peer educators, or *promotores*, can then be responsible for conducting individual or group health education sessions within their communities. In addition to *promotores*, peer advocates, or Latinos with a current or previous mental health illness who have undergone treatment, can be trained in a similar capacity. Peer advocates can also be used to facilitate access to treatment by serving as the first point of access for Latinos suffering from depression. Through interacting with a high-functioning peer who is effectively managing mental illness, a newly diagnosed Latino can interact with a personal role model while simultaneously accessing appropriate mental health education. *Promotores* programs offer a level of access to the community that is unparalleled, and because they reside within the communities they serve community members are more likely to be able to discuss the issues surrounding their mental health status and follow up on referral information. Additionally, because *promotores* and peer advocates are most often employees of the agencies that provide treatment, a strategic follow-up plan can be formed that links the provider, case manager, and peer educator to better facilitate successful outcomes. It is essential that communities leverage their existing community-based resources and integrate traditional medicine and lay health workers. In addition, these strategies are beneficial for Latino subpopulations speaking indigenous languages who may be further isolated in their respective communities. The use of *promotores* or peer advocate programs disencumber valuable provider time by educating the patient prior to, or in between, doctor visits. Peer educators can be trained to work in collaboration with providers to provide the social support network often lost upon immigration. An additional advantage to peer education programs is that the transportation barriers often experienced can be alleviated as patients can work with *promotores* in multiple settings, such as the client's home.

### **Institutional Changes**

Health care organizations and media networks must respond to the linguistic needs of their patient population communities. To date, many of the national hotline numbers, including the National Suicide Hotline, do not provide counseling and education in Spanish. The relatively low participation of Latinos, particularly those who are Spanish-speaking, points to the fact that historical neglect and underservice has led to the accurate perception that services such as these are not designed for Latinos. Even following the passage of Title IX, which guarantees translation to those seeking health services, many national hotlines are not equipped with Spanish-speaking staff. One immediate mandate should be the training and placement of Spanish-speaking and culturally-appropriate staff on all national 1-800 health and human service telephone lines. With Latinos making up the largest minority population in the United States, many hospitals, even in Latino-dominated areas, do not yet display signage in Spanish. In addition, hospital staff who serve as the "face" of the organization need to be trained in Latino-

specific cultural norms and to be sensitive to the linguistic and literacy levels of many Latino patients. Furthermore, given the incredible stigma of mental illness, adequate translation services become even more imperative. It is essential that patients are not made to rely on family members or their children for translation. Culturally- and linguistically-appropriate care must be ensured in all health care settings, particularly mental health, wherein the patient's description of his/her condition is often the only diagnostic criterion the provider has for making decisions regarding treatment regimens.

A great deal of current research is also pointing to the effectiveness of treatment modalities that incorporate the family and community. These are proving to be less costly when measured in both human and economic terms, with patients integrated in daily life and cared for within their homes as opposed to institutions. The WHO World Mental Health Survey Consortium has proven over three decades of research that schizophrenics treated in poorer countries with greater levels of social integration fair far better than they do when treated in industrialized nations, wherein they are more likely to be institutionalized, homeless, or incarcerated. Relatives tend to be more effective in calming troubled patients and play an active role in patient adherence to treatment regimens (Vedantam, 2005). Mental health institutions' accessibility to immediate and extended family members may improve treatment outcomes for long-term residents.

Given the barriers to care and presentation of mental illness within clinics and traditional medical settings, the integration of mental health into the overall health care system becomes even more imperative. Care for most illnesses is generally covered through private and public insurance. However, most insurance plans provide only limited coverage for treating mental illness. The divisions that exist with respect to financing mental health care when compared to traditional health services must be eliminated. The separation between "traditional" health care and mental health care can result in various negative effects such as the compromise of continuity of care. Given the chronic nature of mental illness and the many ways in which mental illness affects physical well-being, it is imperative that the system move toward equal benefit coverage for mental health and substance abuse in health insurance (Hogan, 1998).

The creation of community-based medicine strategies that link *promotores* with health care providers and organizations will greatly benefit the underserved, while simultaneously educating both providers and educators about the needs of Latinos.

### **Considerations of Diversity**

As previously stated, the Latino population is made up of several groups, each with distinct historical, sociopolitical, and environmental histories that must be understood when designing mental health interventions and providing treatment. Mental health providers should be cautioned to avoid assumptions based on national origin, educational levels, or any other singular criteria. A thorough evaluation should include administration of only mental health scales that have been validated and proven effective with the particular Latino group in question. In addition, providers should take into consideration previous and current social support networks, immigration experience (if relevant), occupation, hazardous exposures, chemical use and dependency history, and family dynamics and history of mental illness within the family.

The factors influencing Latinos' mental health status, and their perceptions of what is important, are shaped, modified, and maintained by the interaction of people within the community or organizational environments in which they live. Traditionally, Latinos tend to live in highly-dense Latino communities wherein social norms are well established. As research continues to point to a worsening of mental health status upon acculturation, it is imperative that the "protective factors" within Latino cultures be further studied, clearly identified, and incorporated into prevention, health education, and mental illness treatment programs.

Misdiagnosis and mistreatment of minorities is prevalent, with Latinos and African Americans three and four times more likely to be diagnosed with schizophrenia than their White counterparts, respectively. An analysis of 134,523 mentally-ill patients included in a Veterans Administration registry found dramatic discrepancies in diagnosis of mental disorders with the only explanatory factor being race/ethnicity (Blow, Zeber, McCarthy, Valenstein, Gillon, and Bingham, 2004). Although Latinos and African Americans are no more likely to be schizophrenic, and are often found to suffer from depression after reassessment, the cultural competence level of mental health providers is undoubtedly contributing to the high level of error that is occurring upon primary diagnosis (Vedantam, 2005). In addition to misdiagnosis and subsequent mistreatment, African Americans and Latinos are also less likely to receive first-choice medications, such as clozapine, for refractory mental illnesses, pointing to a bias favoring Whites in prescribed treatment (Copeland, Zeber, Valenstein, and Blow, 2004).

### **Policy Changes**

Latinos, particularly those most vulnerable such as children, youth, and the elderly, must be provided with comprehensive mental health care. Strategies to provide culturally- and linguistically-relevant mental health care and to facilitate early diagnosis are essential if we are to keep costs to a minimum. Exacerbation of mental health problems due to lack of insurance and inability to pay for services serve as insurmountable barriers to Latinos receiving care. Comprehensive strategies that provide mental health care for undocumented Latinos are critical to the success of all initiatives working with the Latino community. This becomes even more imperative upon understanding that many Latino families are composed of members who are both documented and undocumented. The development of Latino-specific models that incorporate family dynamics from which to develop programs are essential if we are to adequately address the multiple factors impacting mental health.

For Latinas dealing with domestic violence, Spanish-speaking staff should be made available and shelters that allow the incorporation of children should be developed. English-only shelters will exacerbate the sense of isolation Latinas often feel when seeking respite from an abusive relationship. In addition, Latino-centered alcohol and drug treatment centers are needed wherein parents are allowed to bring their children. Chemical use and dependency treatment facilities and programs should combine successful community-based organization interventions in the U.S. with proven components from Latin America to ensure culturally-relevant solutions without having to recreate entire service programs. Family-based treatment models that can be transcreated to meet the needs of Latino populations should be encouraged through

developmental grant efforts. Additional policies can be written that, in turn, provide funding for replication of successful treatment models throughout the U.S.

In addition, policies should stipulate that a representational number of minorities be included in mental health-related pharmacologic testing. Latinos, African Americans, Asian/Pacific Islanders, and Native Americans are woefully absent in clinical trial registries. When race and ethnicity are considered, African Americans have been found to be included at times, but never in sufficient quantities to yield meaningful statistical analysis (Vedantam, 2005). Given the increasing diversity of our nation's population, inclusion and significant representation of individuals from all major racial/ethnic categories should be an intrinsic characteristic of all clinical trials receiving government subsidies.

### **Media**

Health social marketing strategies, such as Univision's ¡*Enterate!* Campaign, should be encouraged at both the local and national levels. The incorporation of local and national celebrities to educate Latino communities about mental health issues will do a great deal to break down the stigma that so often inhibits Latinos from seeking care. Educational campaigns designed around the critical mental health issues presented in this paper should be developed in order to raise awareness and educate the community on these and other mental health conditions and to promote early access to appropriate treatment and intervention. In addition, strategies that incorporate cultural pride and the retention of protective factors often lost within Latinos following immigration can be incorporated into advertising, event planning, and the marketing and implementation of mental health services, so as to foster both cultural pride and motivation to succeed while improving access to mental health diagnosis and treatment.

### **Summary**

There are a number of steps that must be taken to ensure access to culturally- and linguistically-appropriate mental health care, including a national commitment to health plans and insurance policies that incorporate culturally- and linguistically-appropriate mental health services. In addition, mass education campaigns that reduce the stigma and dispel myths of mental health issues in the community are warranted. Family-centered strategies that provide information regarding Latino-specific and general signs and symptoms related to mental health problems will most likely be more effective in achieving overall community outreach, when compared to those centered on the individual.

The development of creative strategies to increase the number of Latino and Latino-sensitive mental health providers and community outreach workers, such as *promotores*, is a necessary step in ensuring that mental health needs are met at all levels. Without the incorporation of community-based strategies and recommendations, access to mental health treatment among Latinos will continue to be sparse at best and late diagnosis will remain prevalent. Furthermore, the participation of community-based organizations in the creation and ongoing evaluation of program effectiveness is necessary to ensure that the models developed have clearly demonstrated an impact on the underserved.



As the Latino population continues to grow, mental health status is not only an integral part of the development of healthy Latino communities, but also essential to the overall health of our nation. Latinos are a young, vital, and growing part of our nation's population, and their impact as productive members of U.S. society will be thwarted if their mental health issues are not adequately addressed. It is estimated that by the year 2050 more than 25% of the U.S. population will be Latino, and given the fact that Latinos are among the most youthful minority population, many will be active members of the U.S. workforce (U.S. Census Bureau, 2004). The development of mental health strategies that meet the needs of this youthful population is not only essential for Latinos, but imperative to the overall health and productivity of the United States.

## References

Aguilar-Gaxiola (February, 2005). Depression in Latinos. Presentation conducted at The Latino Mental Health Summit, Long Beach, California.

Aguilar-Gaxiola, S., L. Zelezny, B. Garcia, C. Edmonson, C. Alejo-Garcia, and W.A. Vega. (2002). Translating research into action: reducing disparities in mental health care for Mexican Americans. *Psychiatric Services*, 53(12), pp. 1563-1568.

Alexopoulos, G.S., B.S. Meyers, R.C. Young, S. Campbell, D. Silbersweig, and M. Charlson. (1997). "Vascular depression" hypothesis. *Arch Gen Psychiatry*, 54(10), pp: 915–922.

American Diabetes Association (2004). Depression Fact Sheet. Retrieved on November 8, 2004, <<http://www.diabetes.org>>.

American Medical Association (2001). Facts about domestic violence. Retrieved on November 8, 2004, <http://www.ama-assn.org/ama/pub/category/4867.html>.

Anderson, R.J., P.J. Lustman, R.E. Clouse, M. de Groot, and K.E. Freedland. (2000). Prevalence of depression in adults with diabetes: A systematic review. *Diabetes*, 49(Suppl 1): A64.

Anderson, R.N. (2002). Deaths: Leading causes for 2000. *National Vital Statistics Reports*, 50(16). Hyattsville, Maryland: National Center for Health Statistics.

Barlow, K.M., D.M. Taylor, and W.E. Lambert. (2000). Ethnicity in America and feeling "American." *Journal of Psychology: Interdisciplinary and Applied*, 134(6), pp: 581-600.

Berry, J.W. (1990). Comparative studies of acculturative stress. *International Migration Review*, 21, pp: 491-511.

Bhugra, D. (2003). Migration and depression. *Acta Psychiatrica Scandinavica*, 108(418), pp: 67-72.

Blow, F.C., J.E. Zeber, J.F. McCarthy, M. Valenstein, L. Gillon, and C.R. Bingham. (2004). Ethnicity and diagnostic patterns in veterans with psychoses. *Social Psychiatry and Psychiatric Epidemiology*, 39(10): 841-851.

Bush, D.E., R.C. Ziegelstein, M. Tayback, D. Richter, S. Stevens, and H. Zahalsky. JA (2001). Even minimal symptoms of depression increase risk after acute myocardial infarction. *American Journal of Cardiology*, 88: 337-341.

Cabassa, L. (2005). Latinas' suicide attempts: A sociocultural perspective. Presentation conducted at The Latino Mental Health Summit, Long Beach, California.

Caetano, R. (2005). Drinking, alcohol problems, abuse and dependence among U.S. Hispanics. Presentation conducted at The Latino Mental Health Summit, Long Beach, California.

Caetano, R., and C.L. Clark. (1999). Trends in situational norms and attitudes toward drinking among Whites, Blacks, and Hispanics: 1984–1995. *Drug and Alcohol Dependence* 54:45–56.

Caetano, R., J. Schafer, C.L. Clark, C.B. Cunradi, and K. Rasberry. (2000). Intimate partner violence, acculturation, and alcohol consumption among Hispanic couples in the United States. *Journal of Interpersonal Violence*, 15(1), pp: 30-45.

Caetano, R., and F.H. Galvan. (2001). Alcohol use and alcohol-related problems among Latinos in the United States. In: Aguirre-Molina, M.; C.W. Molina; and R.E. Zambrana, eds. *Health Studies in the Latino Community*. San Francisco: Jossey-Bass, pp. 383-412.

Campbell, J.C. (2002). Health consequences of intimate partner violence. *The Lancet*, 359, pp: 1331-1336.

Canto, M.T. and K.C. Chu. (2000). Annual Cancer Incidence Rates for Hispanics in the United States: Surveillance, Epidemiology and End Results, 1992-1996. *Cancer*, 88, 2642-2652.

Carlson, B.E., and L-A. McNutt. (1998). Intimate partner violence: Intervention in primary health settings. *Battered women and their families: Intervention strategies and treatment programs* (2<sup>nd</sup> ed., pp. 230-270). New York: Springer.

Carlson, B.E., L-A. McNutt, and D.Y. Choi. (2003). Childhood and adult abuse among women in primary health care: Effects on mental health. *Journal of Interpersonal Violence*, 18(8), pp: 924-941.

Centers for Disease Control and Prevention/National Center for Health Statistics. (2002). Deaths, percent of deaths, and death rates for the 15 leading causes of death in 5-year age groups, by Hispanic origin, race for non-Hispanic population and sex: United States 2000. pp. 1-100 Retrieved November 8, 2004, <[http://www.cdc.gov/nchs/data/dvs/LCWK4\\_2000.pdf](http://www.cdc.gov/nchs/data/dvs/LCWK4_2000.pdf)>.

Centers for Disease Control and Prevention/National Center for Chronic Disease Prevention and Health Promotion. (2004). National Youth Risk Behavior Survey (YRBS). Health, United States. *Morbidity and Mortality Weekly Report*, 53, SS/2.

Centers for Disease Control and Prevention. (2004). Health disparities experienced by Hispanics – United States. *Morbidity and Mortality Weekly Report*, 53, (40): 935-937.

Centers for Disease Control and Prevention. (2004). Suicide among Hispanics – United States, 1997-2001. *Morbidity and Mortality Weekly Report*, 53, (22): 478-481.

Centers for Disease Control and Prevention. (2003). *HIV/AIDS Surveillance Report*, 15, Atlanta:U.S. Department of Health and Human Services, pp. 1-46, Retrieved November 8, 2004, <<http://www.cdc.gov/hiv/stats/hasrlink.htm>>.

Centers for Disease Control and Prevention. (June 11, 2004). Suicide Among Hispanics – United States, 1997-2001. *Morbidity and Mortality Weekly Report*. 53(22); pp.478-481. Retrieved November 8, 2004, <<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5322a5.htm>>.

Centers for Disease Control and Prevention. (June 11, 2004). Methods of Suicide Among Persons Aged 10-19 Years- United States, 1992-2001. *Morbidity and Mortality Weekly Report*. 53(22); pp.471-474, Retrieved November 8, 2004, <<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5322a2.htm>>.

Chavez, E.L., E.R. Oetting, and R.C. Swaim. (1994). Dropouts and Delinquency: Mexican American and Caucasian Non-Hispanic Youth. *Journal of Child Psychology*, 23(1), pp.47-55

Copeland, L.A., J.E. Zeber, M. Valenstein, and F.C. Blow. (2004). Racial disparities in the use of atypical antipsychotic medications among veterans. *The American Journal of Psychiatry*, 160: 1817-1822.

Crowley, M.O. (2003). Latino access to mental health, development disabilities, and substance abuse services in North Carolina. *North Carolina Medical Journal*, 64(3): 127-128.

Department of Health and Human Services (2000). Communication Strategy Guide: A Look at Methamphetamine Use among Three Populations. Substance Abuse and Mental Health Services Administration Center Substance Abuse Prevention. DHHS (SMA) 00-3423.

Dienemann, J., E. Boyle, D. Baker, W. Resnick, N. Wiederhorn, and J. Campbell. (2000). Intimate partner abuse among women diagnosed with depression. *Issues in Mental Health Nursing*, 21, pp: 499-513.

Drake, R.E., K. Mueser, M.F. Brunette, and G.J. McHugo. (2004). A review of treatments for people with severe mental illnesses and co-occurring substance use disorders. *Psychiatric Rehabilitation Journal*, 27(4), pp: 360-374.

Drug and Alcohol Services Information System: The DASIS Report (2004). Primary Methamphetamine/Amphetamine Treatment Admissions: 1992-2002. Substance Abuse and Mental Health Services Administration. Retrieved November 8, 2004, <[www.samhsa.gov/2k4/meth](http://www.samhsa.gov/2k4/meth)>.

Ferketich, M.A., J.A. Schwartzbaum, D.J. Frid, and M.L. Moeschberger. (2000). Depression as an antecedent to heart disease among women and men in the NHANES I study. *Archives of Internal Medicine*, 160, 1261-1268.

Ferraro, K., and J.M. Johnson. (1983). How women experience battering: The process of victimization. *Social Problems*, 30(3), pp: 325-329.

Fix, M.E., and J.S. Passel. (2001). Immigration at the beginning of the 21st century. Washington, DC. The Urban Institute. Retrieved November 8, 2004, <<http://www.urban.org/url.cfm?ID=900417>>.

Flores, Y. (2005). Violence and depression among Latinas: Implications for mental health. Presentation conducted at The Latino Mental Health Summit, Long Beach, California.

Gil, A.G., and W.A.Vega. (2001). Latino drug use: scope, risk factors and reduction strategies. In M. Aguirre-Molina, C. W. Molina, and R. E. Zambrana (Eds.). *Health issues in the Latino community*. San Francisco, CA: Jossey-Bass.

Gonzalez, H.M. (2005). Mental health and medical co-morbidities: The case of older Mexican Americans. Presentation conducted at The Latino Mental Health Summit, Long Beach, California.

Gonzalez, H.M., M.N. Haan, and L. Hinton. (2001). Acculturation and the prevalence of depression in older Mexican Americans: Baseline results on the Sacramento area Latino Study on Aging. *Journal of the American Geriatrics Society*, 49(7), pp: 948-953

Gould, M.S., and R.A. Kramer. (2001). Youth suicide prevention. *Suicide Life Threat Behaviors*, 31(1), pp: S6-S31.

Grant, B.F., F.S. Stinson, D.S. Hasin, D.A. Dawson, S.P. Chou, and K. Anderson. (2004). Immigration and lifetime prevalence of DSM-IV psychiatric disorders among Mexican Americans and Non-Hispanic Whites in the United States. *Archives of General Psychiatry*,

Harker, K. (2001). Immigrant generation, assimilation, and adolescent psychological well-being. *Social Forces*, 79, pp: 969-1004.

Healthy Place (2004). Depression Community Fact Sheet. Retrieved on November 8, 2004, <<http://www.healthyplace.com/communities/Depression/index.asp>>.

Hirsch, J.S. (2003). *A courtship after marriage: Sexuality and love in Mexican transnational families*. Berkeley: University of California Press.

Hogan, M.F. (1998). The public sector and mental health parity: time for inclusion. *Journal of Mental Health Policy and Economics*, 1(4), pp. 189-198.

Hough, R.L., J.A. Landsverk, and M. Karno. (1987). Utilization of health and mental health services by Los Angeles Mexican-American and non-Latino whites. *Archives of General Psychiatry*, 44, pp: 702-709.

Hovey, J.D., and C.G. Magaña. (2002). Exploring the mental health of Mexican migrant farm workers in the Midwest: psychosocial predictors of psychosocial distress and suggestions for prevention and treatment. *The Journal of Psychology*, 136(5), pp: 493-513.

Johnson-Powell, G., J. Yamamoto, G.E. Wyatt, and W. Arroyo. (1997). Transcultural child development: *Psychological assessment and treatment*. New York: John Wiley and Sons.

Johnston, L.D., P.M. O'Malley, and J.G. Bachman. (1999). The monitoring the future national survey results on adolescent drug use. Overview of key findings, 1999. Bethesda, MD: National Institute on Drug Abuse.

Kaiser Family Foundation. (2003). *Key Facts: Latinos and HIV/AIDS*. (6007), Retrieved on November 8, 2004, <[www.kff.org](http://www.kff.org)>.

Krishnan, S.P., J.C. Hilbert, and D. VanLeeuwen. (2001). Domestic violence and help-seeking behaviors among rural women: Results from a shelter-based study. *Family and Community Health*, 24(1), pp: 28-38.

Lang, J. G., Munoz, R. F., Bernal, G., and Sorensen, J. L. (1982). Quality of life and psychological well-being in a bicultural Latino community. *Hispanic Journal of Behavior Sciences*, 4, 433-450.

La Roche, M.J. (2002). Psychotherapeutic considerations in treating Latinos. Cross-cultural psychiatry. *Harvard Review Psychiatry*, 10, pp: 115-122.

Lopez, Steven R. (2002). A Research Agenda to Improve the Accessibility and Quality of Mental Health Care for Latinos. *Psychiatric Services*. 53(12), pp: 1569-1573

Lopez, Steven R. (2005). Acculturation and Mental Health. Presentation conducted at The Latino Mental Health Summit, Long Beach, California.

Lopez-Zetina, J. (2004). Uso de metanfetaminas en la frontera Mexico/Estados Unidos. Presentación el 10 de diciembre, 2004, Universidad de Baja California, México.

Matano, R.A., S.F. Wanat, D. Westrup, C. Koopman, and A.D. Whitsell. (2002). Prevalence of alcohol and drug use in a highly educated workforce. *The Journal of Behavioral Health Services and Research*, 29, pp.30-44

McGrath, E., P. Gwendolyn, B. Strickland, and N. Russo. (1990). Women and depression: Risk factors and treatment issues. In: *Final Report of the American Psychological Association's National Task Force on Women and Depression*. Washington, DC: American Psychological Association. Retrieved on November 8, 2004, <[http:// www.apa.org/books](http://www.apa.org/books)>.

Miranda, A.O. (1995). Adlerian life styles and acculturation as predictors of the mental health of Hispanic adults. Unpublished doctoral dissertation. Georgia State University, Atlanta.

Miranda, A.O., and K.B. Matheny. (2000). Socio-psychological predictors of acculturative stress among Latino adults. *Journal of Mental Health Counseling*, 22(4): pp. 306-317.

Menjivar, C., and Salcido, O. (2002). Immigrant women and domestic violence: Common experiences in different countries. *Gender and Society*, 16(6), pp. 898-920.

Miranda, A., and D. Umhoefer. (1998). Acculturation, language use, and demographic variables as predictors of the career self-efficacy. *Journal of Multicultural Counseling and Development*, 26(1), 39-52.

Morash, M., H. Bui, and A. Santiago. (2000). Cultural-specific gender ideology and wife abuse in Mexican-descent families. *International Review of Victimology*, 7, pp. 67-91.

National Alliance for Hispanic Health, (2004). Depression Health Fact Sheet. Retrieved on November 8, 2004, <<http://www.hispanichealth.org/depression>>.

National Council of La Raza (2004). Health and Family Support. Retrieved November 8, 2004, <<http://www.nclr.org/content/topic/detail/481/>>.

National Council of La Raza (2002). Testimony on Drug Sentencing and its Effects on the Latino Community. Presented by Charles Kamasaki, Senior VP.

National Council of La Raza, Walker, N., J. Senger, F. Villaruel, and A. Arboleda. (2004). *Lost Opportunities: The Reality of Latinos in the U.S. Criminal Justice System*. National Council of La Raza: Washington, DC.

National Institute on Drug Abuse. (2002). Info Facts. National Institutes of Health, U.S. Department of Health and Human Services. Retrieved on November 8, 2004, from <<http://www.nida.NIH.gov/>>.

Otsuki, M. (2002). Southern California Center of Excellence on Youth Violence Prevention, University of California, Riverside. Fact Sheet: Youth Suicide. Pp.1-10. Retrieved on November 8, 2004, <<http://www.stopyouthviolence.ucruedu/publications/factsheets/youthsuicide.pdf>>.

Ramos, B.M., and B.E Carlson. (2004). Lifetime abuse and mental health distress among English-speaking Latinas. *Affilia*, 19(3), pp. 239-256.

Rios-Ellis, B., R.A. Leon, E.F Trujillo, S. Enguidanos, M. Dwyer, C.A. Ugarte, and R. Roman. (2003). From Words to Action: The evolution of a national Latina HIV/AIDS needs assessment. *Ciencias de la Conducta*, 18(1), pp. 78-104.

Rodriguez, M.A., H.M. Bauer, Y. Flores-Ortiz, and S. Szkupinski-Quiroga. (1998). Factors affecting patient-physician communication for abused Latina and Asian immigrant women.

Journal of Family Practice, 47(4). Gale Group Inc. Retrieved February 10, 2005, <[http://0-global.factiva.com.coast.library.csulb.edu/en/arch/print\\_results.asp](http://0-global.factiva.com.coast.library.csulb.edu/en/arch/print_results.asp)>.

Rogler, L.H., Cortes, D.E, and Malgady, R.G. (1991). Acculturation and mental health status among Hispanics: Convergence and new directions for research. *American Psychologist*, 46: pp. 585-597.

Ross, C.E., J. Mirowsky, and W.C. Cockerham, W.C. (1983). Social class, Mexican culture, and fatalism: Their effects on psychological distress. *American Journal of Community Psychology*, 11, pp. 383-399.

Substance Abuse and Mental Health Services Administration (2001). Suicide facts and statistics. Retrieved November 8, 2004, <<http://www.nimh.nih.gov/suicideprevention/suifact.cfm>>.

Schichor, A., and B. Bernstein. (1994). Self-reported depressive symptoms in inner-city adolescents seeking routine health care. *Adolescence*, 29(114), pp. 379-388.

Schoenbaum, M., J. Miranda, and C. Sherbourne, N. Duan, K. Wells. (2004). Cost effectiveness of interventions for depressed Latinos. *Journal of Mental Health Policy Economics*, 7: pp. 69-76.

Schur, C.L. and J. Feldman. (2001). Running in Place: How Job Characteristics, Immigrant Status, and Family Structure keep Hispanics Uninsured. New York: Commonwealth Fund

Searle, W., and C. Ward. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations*, 14, pp. 449-464.

Smart, J.F., and D.W Smart. (1995). Acculturative stress of Hispanics: Loss and challenge. *Journal of Counseling and Development*, 73, pp. 390-396.

Sokol-Katz, J.S., and P.M. Ulbrich. (1992). Family structure and adolescent risk-taking behavior: A comparison of Mexican, Cuban, and Puerto Rican Americans. *International Journal of the Addictions*, 27, 1197-1209.

Soto, J.J. (2000). Mental Health Services Issues for Hispanics/Latinos in Rural America. In *Motion Magazine*: May 30.

Stonefeinstein, B.E.S., and C. Ward. (1990). *Loneliness and psychological adjustment of sojourners: New perspectives on culture shock*. In D.M. Keats, D. Munro, and L. Mann (Eds.), *Heterogeneity in cross-cultural psychology*: pp. 537-547. Lisse, Netherlands: Swets and Zeitlinger. 1990.

Suro, Roberto (1999). *Strangers Among Us: Latino Lives in a Changing America*. New York: Vintage Books.



Swanson, J. W., A.O. Linskey, R. Quintero-Salinas, A.J. Pumariega, and C.E. Holzer, III. . (1992). A binational school survey of depressive symptoms, drug use, and suicidal ideation. *Journal of the American Academy of Child and Adolescent Psychiatry*, 669-678. 31

The Commonwealth Fund (2003). Insurance, access, and quality of care among Hispanic populations: 2003 Chartpack.

The National Institute on Drug Abuse (NIDA). (2002). Retrieved on November 8, 2004, <[www.drugabuse.gov](http://www.drugabuse.gov)>.

Torres, S., and H-R Han. (2003). Women's perceptions of their male batterer's characteristics and level of violence. *Issues in Mental Health Nursing*, 24, pp. 667-679.

Turner, R.J., and A.G. Gil. (2002). Psychiatric and substance use disorders in South Florida: Racial/ethnic and gender contrasts in a young adult cohort. *Archives of General Psychiatry*, 59, 43-50.

U.S. Bureau of the Census. (August, 2004). *Income, poverty, and health insurance coverage in the United States: 2003*. Publication No. P60-226.

U.S. Bureau of the Census. (March, 2004). *U.S. interim projections by age, sex, race, and Hispanic origin*. Retrieved June 10 from <http://www.census.gov/ipc/www/usinterimproj/>.

U.S. Bureau of the Census. (March 2003). *The Hispanic Population: Census 2003 Brief*.  
U.S. Department of Health and Human Services. Office of the Surgeon General. Substance Abuse and Mental Health Services Administration (2001). *Mental Health: Culture, Race, and Ethnicity. A Supplement to Mental Health: A Report of the Surgeon General. (SMA)-013613*. Retrieved November 8, 2004, <<http://SAMSHA.gov>>.

U.S. Department of Health and Human Services. Substance Abuse and Mental Health Services Administration (2003). *Prevalence of substance use among racial and ethnic subgroups in the U.S.* Retrieved June 22, 2005, <<http://drugabusestatistics.samhsa.gov/NHSDA/Ethnic/ethn1007.htm>>.

U.S. Department of Justice (1997). *Lifetime Likelihood of Going to State or Federal Prison*. NCJ-160092, pp. 1-13. Retrieved on November 8, 2004, <<http://www.OJP.usdoj.gov/bjs/>>.

Vedantam, S. (2005). Patient diversity is often discounted: Alternatives to mainstream medical treatment call for recognizing ethnic, social alternatives. *Washington Post*, Sunday, June 26; A01.

Vedantam, S. (2005). Social network's healing power is borne out in poorer nations. *Washington Post*, Monday, June 27; A01.

Vedantam, S. (2005). Racial disparities found in pinpointing mental illness. *Washington Post*, Tuesday, June 28; A01.

Vega, W. (1995). The study of Latino families: A point of departure. In R. Zambrana (ed.), *Understanding Latino Families* (pp. 3-17). Thousand Oaks, CA: Sage.

Vega, W.A. and M. Alegria. (2001). Latino mental health and treatment in the United States. In M. Aguirre-Molina, C.W. Molina and R.E. Zambrana, (Eds.), *Health issues in the Latino community* (pp.179-208). San Francisco: Jossey Bass.

Vega, W.A., B. Kolody, S. Aguilar-Gaxiola, et al. (1998). Lifetime prevalence of DSM-III-R psychiatric disorders among urban and rural Mexican Americans in California. *Archives of General Psychiatry*, 55, pp. 771-778.

Vega, W.A., B. Kolody, and S. Aguilar-Gaxiola. (1999). Gaps in service utilization by Mexican Americans with mental health problems. *American Journal of Psychiatry*, 156, pp. 928-934

Vega, W.A., W.M. Scribney, and Achara-Abrahams. (2003). Co-occurring alcohol, drug, and other psychiatric disorders among Mexican-origin people in the United States. *American Journal of Public Health* 93(7): pp. 1057-1064.

Ward, C. and A. Kennedy (1994). Acculturation strategies, psychological adjustment, and sociocultural competence during cross-cultural transitions. *International Journal of Intercultural Relations*, 18, 329-343.

Williams, S., and J.L. Kohout. (1999). A survey of licensed practitioners of psychology: Activities, roles, and services. Washington, DC: American Psychological Association.

Walker, N. E., J. M. Senger, F.A. Villarruel, A. Arboleda. (2004). *Lost Opportunities: The Reality of Latinos in the U.S. Criminal Justice System*. Washington, DC: National Council of La Raza.

Zayas L., C. Kaplan, S. Turner, K. Romano, and G. Gonzales- Ramos. (2000). Understanding Suicide Attempts by Adolescent Hispanic Females. *Social Work*, 45(1): pp. 53-63