UNIVERSITY OF MIAMI

SUBSTANCE ABUSE, INTIMATE PARTNER VIOLENCE AND RISK FOR HIV AMONG A COMMUNITY SAMPLE OF HISPANIC WOMEN

By

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A DISSERTATION

Submitted to the Faculty of the University of Miami in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Coral Gables, Florida

May 2008
UNIVERSITY OF MIAMI

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

SUBSTANCE ABUSE, INTIMATE PARTNER VIOLENCE AND RISK FOR HIV AMONG A COMMUNITY SAMPLE OF HISPANIC WOMEN

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Among the health disparities affecting the U.S. Hispanic population today are those relating to risky behaviors such as substance abuse, intimate partner violence (IPV) and HIV/AIDS. However, few studies have examined how these conditions may impact this population. The purpose of this dissertation was to explore the experiences that Hispanic women in South Florida have with regard to substance abuse, IPV and risks for HIV/AIDS, to describe how these conditions may be related, and to develop a model that can be used to guide research and interventions targeting this population. This dissertation uses data collected in Project DYVA (Drogas y Violencia en las Americas-Drugs and Violence in the Americas), a pilot research study that utilized both qualitative (Phase I) and quantitative (Phase II) research methods to describe the experiences of Hispanic women in South Florida between the ages of 18 and 60 with regard to substance abuse, violence and risky sexual behaviors.

Three studies were conducted as part of this dissertation. The first study utilizes data collected during the qualitative phase of Project DYVA. During this phase eight focus groups were conducted and analyzed using qualitative content analysis (N = 81). The second and third studies utilize data collected during the second phase of Project DYVA. In this phase cross-sectional questionnaires collecting information regarding demographics, acculturation, self-esteem, depression, substance abuse, IPV and risks for
HIV, were administered to 82 Hispanic women. Univariate and multivariate statistics were used to explore the relationships between substance abuse, IPV and risk for HIV (study 2) and between resource availability, IPV and depression (study 3). The findings from this dissertation suggest that substance abuse, IPV and risk for HIV are closely related intersecting health issues. IPV, the condition that emerged as the most salient of the three, also appears to be closely associated with resource availability (i.e., self-esteem and income) and depression. Additional individual, cultural, relationship and socio-environmental factors that may play a significant role in shaping the experiences that Hispanic women have with regards to these intersecting conditions were also identified and organized into a model.
DEDICATION

This is dedicated to the participants of Project DYVA (Drugs and Violence in the Americas) and other women whose voices have not yet been heard.
ACKNOWLEDGMENTS

The author wishes to acknowledge several individuals and organizations for their continued support.

- Victoria B. Mitrani, PhD, committee chairperson and Etiony Aldarondo, PhD, Clyde B. McCoy, PhD, JoAnn Trybulski, PhD, NP and Elías P. Vasquez, PhD, NP, FAAN members of my dissertation committee

- Dean Nilda Peragallo, DrPH, RN, FAAN, previous committee chairperson and mentor

- Faculty and Staff of The Graduate School and coordinators of the Interdepartmental PhD Program

- Faculty and Staff of The School of Education and Psychological Studies, The School of Epidemiology and Public Health and The School of Nursing & Health Studies

- Faye Gary, EdD, RN, FAAN, Ms. Janet Jackson and Hossein Yarandi, PhD from the Substance Abuse Mental Health Service Administration (SAMHSA), Minority Fellowship Program (MFP) at the American Nurses Association (ANA)

- The administration and staff at Hispanic Unity of Florida

- The Hispanic women who participated in Project DYVA (Drugs and Violence in the Americas)

- Luis E. Guarda, Margarita Gonzalez, Rolando Gonzalez, Carlos-Andres Gonzalez and the rest of my beloved family.

The author also wishes to acknowledge the financial support from various institutions.

- The SAMHSA, MFP at the ANA

- The Graduate School and The School of Nursing & Health Studies, University of Miami

- Inter-American Drug Abuse Control Commission (CICAD), Organization of American States (OAS) and Secretaría Nacional Antidrogas [National Antidrug Administration] (SENAD)
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CHAPTER 1: INTRODUCTION

Background

Among the primary goals of Healthy People 2010, a set of health objectives that guides efforts to improve the nation’s health, is to eliminate health disparities that exist within certain groups in the United States (Department of Health and Human Services [DHHS], 2006). Being the largest and fastest growing minority group and comprising over 14% of its population (U.S. Census Bureau, 2005), Hispanics are increasingly becoming an important group to target when addressing the nation’s health. Although the term “Hispanic” or “Latino” is used to categorize persons “of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race” (Office of Minority Health [OMHD], 2008) into one category, Hispanic in the U.S. are far from being a homogenous population. This group is comprised of individuals and sub-populations that vary vastly in regards to their cultural and historical backgrounds, immigration patterns, acculturation levels, demographic characteristics and a host of other socioeconomic and environmental factors that may influence their health. Consequently, when addressing the needs of the U.S. population, it is not only important to learn more about the health of Hispanics as a group in general, but also about the health of the diverse sub-populations throughout the country that comprises this large population.

Among the health disparities affecting the U.S. Hispanic population today are those relating to risky behaviors such as substance abuse, intimate partner violence (IPV), HIV and related psychosocial conditions. Various recent national studies have indicated that Hispanics report higher rates of drug and alcohol abuse and dependence (SAMSHA,
2005), intimate partner violence (IPV) (Caetano, Field, Ramisetty-Mikler & McGrath, 2005) and HIV/AIDS (CDC, 2007a; 2007b) when compared to non-Hispanic Whites and other minority groups. Hispanics may also be more vulnerable to the negative physical and mental health consequences of these conditions. For example, it has been noted that there are higher rates of depression among Hispanic female victims of IPV than women from other racial/ethnic groups (Caetano & Cunradi, 2003). These may be due to economic and resource disparities (e.g., lack of access to health care) that may play a role in how these conditions affect this population. Hispanics in the U.S. as a group have higher rates of poverty, lower educational attainment and lower rates of health insurance coverage than Whites and other racial/ethnic groups (National Center for Health Statistics [NCHS], 2008; U.S. Census Bureau, 2008). These disparities underscore the urgent need of developing services, programs and policies targeting the prevention and treatment of these conditions among Hispanics. In order to help ensure that interventions are both effective and culturally appropriate, more research is needed to increase our understanding of how different Hispanic subgroups in the U.S. are impacted by substance abuse, IPV and risk for HIV/AIDS.

The purpose of this dissertation is to explore the experiences that Hispanic women in South Florida have with substance abuse, IPV and risk for HIV/AIDS, to describe how these conditions may be related to one another, and to develop a model that can be used to guide primary, secondary, and tertiary prevention programs targeting these conditions among Hispanics in South Florida. This dissertation uses data collected in Project DYVA (Drogas y Violencia en las Americas- Drugs and Violence in the Americas). Project DYVA was a pilot research study that used both qualitative (Phase I) and quantitative
(Phase II) research methods to describe the individual and collective experiences of Hispanic women in South Florida between the ages of 18 and 60 with regard to substance abuse, violence and risky sexual behaviors. The role of the doctoral candidate in this study was to serve as a Co-Investigator and Study Coordinator of Project DYVA. At this capacity, the doctoral candidate collaborated with the other investigators (i.e., Nilda Peragallo, Principal Investigator and Dr. Elias Vasquez, Co-Investigator) in the development of the study protocol and procedures. She was also responsible for submitting the study proposal to the funding institution, obtaining initial IRB approval from the University of Miami and submitting continuing reports, managing the protocol, facilitating focus groups, assessing participants and managing the data.

The second and third chapters of this dissertation describe the studies conducted during the qualitative (Chapter 2) and quantitative (Chapter 3) phases of Project DYVA according to the study’s original specific aims. The results of these two studies indicated that IPV was the most prevalent of the three conditions examined in Project DYVA. The fourth chapter of this dissertation applies the Vulnerable Population Conceptual Model (Flaskerud & Winslow, 1998) in a secondary analysis of Project DYVA’s quantitative data to conceptualize and tests the relationship between resource availability, IPV and depression among this sample of Hispanic women.

The following sections will review the epidemiology and literature pertaining to substance abuse, IPV and HIV among Hispanic women. Next, gaps in the scientific literature regarding these conditions will be identified. The specific aims and abstracts of the three studies included in this dissertation (Chapters 2 -4) will then be introduced.
Epidemiology

Substance Abuse

According to the most recent report from the National Survey on Drug Use and Health (Substance Abuse and Mental Health Service Administration [SAMHSA], 2007a), substance abuse rates are slightly higher among Hispanics than other racial/ethnic groups. In this survey, respondents were asked to report their race (e.g., White, Black, Asian) and if they were of Hispanic ethnicity (i.e., those reporting Hispanic, Latino or Spanish origin). Hispanics had slightly higher rates of substance abuse or dependence in the past year (10.0%) than those reporting being non-Hispanic White (9.2%) and non-Hispanic Black (9.0%). Similarly, reported alcohol use among Hispanics (41.8%) was slightly higher than that reported by other ethnic minority groups including Blacks (40.0%), American Indians or Alaskan Natives (37.2%), Native Hawaiians or other Pacific Islanders (36.7%) and Asians (35.4%) (SAMSHA, 2007a). Despite the fact that these rates are not remarkably higher, Hispanics may be disproportionately affected by the negative consequences of substance abuse and comorbid mental health conditions because they are more likely to report receiving less than needed or delayed care for substance abuse and mental health services (23.5%) than both White (10.7%) and Blacks (7.0%) (Wells, Klap, Koike & Sherbourne, 2001).

Although Hispanic women are more likely to report stimulant (21%) use than non-Hispanic women (12%) (SAMSHA, 2007b), they have similar illicit drug use than non-Hispanic women, and report lower rates than their male counterparts (SAMSHA, 2002). Nevertheless, Hispanic women are indirectly affected by their partner’s substance abuse because of its close association with intimate partner violence (IPV) and HIV risk.
behaviors (Caetano, McGrath, Ramisetty-Mikler & Field, 2005; El-Bassel et al., 2007; Fonk, Els, Kidula, Ndinya-Achola & Temmerman, 2005; Lindenberg et al., 2002). Puerto Rican women and Mexican women, Hispanics born in the U.S., and Hispanic women that are more acculturated to the U.S. culture appear to be at higher risk for abusing alcohol and/or illicit drugs (Caetano, Ramisetty-Mikler & McGrath, 2004; Caetano, Ramisetty-Mikler & McGrath, 2005; Lara, Gamboa, Kahramanian, Morales & Bautista, 2005; SAMHSA, 2002).

**Intimate Partner Violence**

There is conflicting evidence regarding whether Hispanics experience IPV more frequently than other racial and ethnic group. While the U.S. Department of Justice’s Bureau of Justice Statistics (2002) reports no significant difference in IPV between Hispanic and non-Hispanics, studies utilizing population based samples rather than criminal statistics have noted that Hispanics are at a higher risk for IPV than other racial/ethnic groups (Caetano et al., 2005; Kantor, Jasinki & Aldarondo, 1998; Tjanden & Theonnes, 2000;). However, some have noted that these differences disappear once socioeconomic factors are controlled for (Kantor et al., 1998; Theones & Tjanden, 2000;). In a more recent study examining the five year course of IPV among a nationally representative sample of married and cohabitating White, Black and Hispanic couples in the U.S., Hispanics and Blacks were found to experience more than twice the incidence of IPV (each 14%) than non-Hispanic Whites (6%), even when socioeconomic variables were controlled for. Over this five year period, Hispanics also experienced a higher reoccurrence (i.e., those reporting IPV both in 1995 and 2002) rate of IPV (58%) when compared to both Blacks (52%) and Whites (37%) (Caetano et al., 2005).
Like other female victims of IPV, Hispanic female victims report poorer physical and mental health than non-abused women (Campbell et al., 2002; Lown & Vega, 2001). However, research suggests that Hispanic female victims may suffer from more negative health consequences than women from other ethnic/racial groups. For example, in a study exploring the relationship between IPV and depression among a probability sample of White, Black and Hispanic households, the prevalence of depression among women reporting IPV was greater for Hispanics (38%) than both Blacks (30%) and Whites (20%) (Caetano & Cunradi, 2003). It has also been noted that suicidal ideation and attempts among Hispanic female victims receiving domestic violence services may be greater than for non-Hispanic women (Krishnan, Hilbert & VanLeeuwen, 2001).

**HIV/AIDS**

Although Hispanics comprise only 14% of the population, they contributed to 18% of the new diagnosed cases in 2005. In this same year, the incidence rate for HIV/AIDS among Hispanics (71.3 per 100,000) was more than four times the rate for Non-Hispanic Whites (27.8 cases per 100,000) (Center for Disease Control & Prevention [CDC], 2007a). Although rates of HIV/AIDS are much higher among Hispanic males than females, when stratified based on gender and compared to Non-Hispanic Whites, Hispanic females are found to experience a greater disparity than their male counterparts. In 2005, while the rate of new HIV/AIDS cases among Hispanic males (56.2/100,000) was three times that of Non-Hispanic White males (18.2/100,000), the rate among Hispanic females (15.8/100,000) was over five times higher than that of Non-Hispanic White females (3.0/100,000) (CDC, 2007a).
Hispanics are also disproportionately impacted by HIV/AIDS mortality. A smaller proportion of Hispanics (61%) are alive at 9 years after their diagnosis than Whites (64%) and Asians (69%) (CDC, 2007a). While HIV/AIDS is the ninth leading cause of death for White women between the ages of 35 to 44, it is the fourth leading cause of death among Hispanic women within this same age category (CDC, 2007a). Heterosexual contact is the most frequent (69%) mode of transmission for HIV/AIDS among Hispanic women (CDC, 2007a). It has been noted that cultural norms relating to masculinity and gender inequities may interfere with Hispanic women’s ability to negotiate condom use and may further place them at risk for HIV by sanctioning risky sexual behaviors among men (Jarama, Kennamer, Poppen, Hendricks & Bradford, 2005; Levy et al., 2005; Marin, 2003).

Intersecting Health Conditions

Substance Abuse and HIV/AIDS

The relationship between substance abuse and HIV has been extensively studied in the general U.S. populations. These studies have documented that substance abuse is related to HIV/AIDS in various ways. Substance abuse not only increases an individual’s risk of being exposed to the virus through direct contact with a contaminated needle when intravenous drug use (IDU) is involved, but it also increases an individual’s likelihood of engaging in high risk sexual behaviors such as unprotected sex (Edlin et al., 1994; Leigh & Stall, 1993; Santibanez, Garfein, Swartzendruber, Purcell, Paxton et al., 2006). There are differences in the major mode of transmission of HIV/AIDS across Hispanic sub-groups that may have implications for the role that substance abuse plays in transmitting the virus. While heterosexual contact is the primary mode of transmission for Hispanic
females, intravenous drug use may play a greater role for transmitting HIV/AIDS among Puerto Rican females (CDC, 2007a). Consequently, risky sexual behaviors that are associated with substance abuse (e.g., inconsistent condom use) may play a greater role in transmitting HIV among non-Puerto Rican Hispanic women.

Substance Abuse and IPV

Although substance abuse has also been closely tied with risks for IPV, differences regarding the nature of these relationships among Hispanics when compared to other racial/ethnic groups have been noted. For example, although female drinking is a significant predictor of male-to-female IPV among White and Black women, it is not related to being victimized among Hispanic women (Field & Caetano, 2003). However, as found among White and Black males, alcohol and illicit drug use is associated with male-to-female IPV (Caetano, Cunradi, Clark & Schafer, 2000; Perilla et al., 1994).

Although drinking during violent episodes has been found to be as common among Hispanic males as among non-Hispanic White and Black males (Caetano et al., 2000), the approval of marital aggression resulting from alcohol abuse is higher among Hispanics than both Blacks and Whites (Field, Caetano & Nelson, 2004).

IPV and HIV/AIDS

The relationship between IPV and HIV has not been examined until more recently. These studies have noted that male-to-female IPV is associated with numerous risk factors for HIV (Geilen, Burke, Mahoney, McDonnell, & O’Campo, 2007). In fact, women reporting victimization by an intimate partner are more likely to report a STI (Bauer et al., 2002), inconsistent condom use, and forced sex without a condom (El-Bassel et al., 2007; Raj et al., 2006). They are also more likely to report engaging in sex
with a HIV-infected partner or an IDU, having multiple partners and injecting drugs (El-Bassel et al., 2007). Research that has aimed to understand the mechanism through which IPV increases a woman’s risk for HIV have documented that abused women fear on insisting that their partners to use condoms (Suarez-Al-Adam, Raffaeilli & O’Leary, 2000), and report sexual control by their male partners (Raj, Silverman & Amaro, 2004).

Gaps in the Literature

Limited Research on Hispanic Females’ Perspectives

Although investigators have recommended the use of qualitative methods in increasing our understanding of culturally specific behaviors and phenomena among racial and ethnic minorities (Gonzalez, 2007; Lugo Steidel, Ikhlas, Lopez, Rahman & Teichman, 2002), substance abuse, violence and HIV research targeting Hispanics have been dominated by quantitative studies. Most of the research specifically addressing substance abuse, IPV and HIV risk behaviors among Hispanic females has been quantitative in nature, estimating the prevalence, describing the consequences, identifying the risk factors (e.g., Alvarez, Olson, Jason, Davis, & Ferrari, J.R., 2004; Caetano, Field, Ramisetty & McGrath, 2005; Field & Caetano, 2003; Peragallo, 1996) and to a much lesser degree describing the effects of interventions targeting behavioral change (Coyle et al., 2004; Flaskerud et al, 1997; Harvey et al., 2004; Peragallo et al., 2005; Raj, 2001). Fewer studies have described Hispanic women’s actual experiences with these from the “emic” or insider’s perspective (Belknap & Sayeed, 2003; Ortiz, 2005; Talasheck, Peragallo, Norr & Dancy, 2004; Peragallo, DeForge, Khoury, Rivero & Talashek, 2002). Learning more about these conditions from the “insider” is helpful in increasing our understanding of cultural factors related to these conditions, in identifying new
perspectives that may have not been considered before, and elucidating findings from quantitative studies by providing a deeper understanding of the underlying phenomena that shape these (Bryman, 1988).

The few qualitative research studies that have aimed to describe the experiences of Hispanic women with regard to substance abuse and violence has largely focused on their perceptions of services relating to these conditions and barriers in accessing these (Trepper, Nelson, McCollum & McAvoy, 2007; Belknap & Sayeed, 2002). On the other hand, qualitative research addressing HIV has focused on describing the experiences of that Hispanic women have disclosing their positive status (Ortiz, 2005), antecedents to unsafe sexual practices (Talasheck, Peragallo, Norr & Dancy, 2004) and perceptions of important Hispanic community issues related to HIV (Peragallo, DeForge, Khoury, Rivero, & Talashek, 2002). Although investigators that have taken a qualitative approach to studying substance abuse, violence and risky sexual behaviors among Hispanic women have contributed significantly to our understanding of cultural factors relating to these conditions, none have targeted Hispanic females from South Florida. Exploring the experiences of Hispanic females from this unique and diverse group of Hispanics is important because they differ from Hispanic from other parts of the country in that they comprise a much higher proportion of the area’s population (e.g., 61.3% in Miami-Dade and 22.8% in Broward counties) and a larger percentage of Hispanics in this area have origins in the Caribbean (e.g., Cuban and Puerto Rican), are foreign born, and speak Spanish at home (U.S. Census Bureau, 2008). These and other differences in the cultural, historical, sociodemographic and environmental characteristics of this Hispanic sub-
groups may play a major role in shaping their experiences with substance abuse, IPV and risk for HIV/AIDS.

Few Intersection Studies

Despite the growing body of literature aiming to quantify the intersection between substance abuse, IPV and HIV (Newcomb, Locke, & Goodyear, 2003; Suarez-Al-Adam et al., 2000), few studies have explored the relationships between these three conditions among Hispanics. Although qualitative studies have indicated that IPV and HIV are closely related conditions among Hispanics (Moreno, 2007; Peragallo et al., 2002), few have studied the intersection of IPV and HIV within this population. These studies have focused on the relationship between IPV and risks for HIV among Hispanics in the Northeastern part of the United States (El-Bassel, & Morril, 2007; Raj et al., 2006, Raj et al., 2004). Their findings may not be generalizable to Hispanic women in South Florida who have different demographic characteristics, may be less acculturated to the U.S. culture, and may ascribe to different cultural beliefs and practices. Given the indication that culture plays a significant role in the risks for substance abuse, IPV and HIV and the relationship between these (Field, Caetano & Nelson, 2004; Jarama, Kennamer, Poppen, Hendricks & Bradford, 2005; Kantor et al., 1998; Levy et al., 2005; Marin, 2003), it important to specifically learn about the intersection of these conditions among Hispanic women in the South Florida community. Further, in a recent literature review of studies describing the intersections between HIV and IPV, the importance of including substance abuse as a third, interwoven health issue, was stressed (Geilen et al., 2007). Despite this recommendation, the author has found no studies that have explored the relationship between all three of these conditions within one integrated framework among Hispanics.
Lack of Theoretically Based Research on Risk and Consequences of IPV

One of the most salient issues affecting the DYVA study participants was IPV. Although a great deal has been learned about the relationship between IPV and negative mental health consequences (e.g., depression) in the general population, few studies have included a significant number of Hispanics in their samples to reported their results according to race and ethnicity. For example, in Golding’s meta-analysis (1999), which is often referenced when describing the impact that IPV has on victims, only 4.1% of the participants of all the combined studies were Hispanic. Therefore, it is uncertain if these results are applicable to Hispanic women. Further, studies that have specifically targeted Hispanics have largely focused on the Mexican-American population (Hazen & Soriano, 2007; Heilemann et al., 2002; Lown & Vega, 2001). The results from these studies may not be generalizable to other groups of Hispanics in the U.S. with different countries of origin, acculturation levels and other sociodemographic characteristics. Research in this area has also mostly relied on clinical samples of women or women that have access to health care (Bauer, Rodriguez & Perez-Stable, 2000; Bonomi et al., 2006; Cooker et al., 2002) and/or have required women to be able to speak and write in English (Bonomi et al., 2006; Breselau et al., 2006; Koopman, Ismailji, & Palesh, 2007). The results of these studies may not apply to Hispanic women in the community that may have limited access to health services and lack proficiency in the English language. Further, although researchers have found that availability of certain resources are related to risks for IPV (e.g., Bonomi et al., 2006; Kantor et al., 1994; Tjaden & Theonnes, 2000) and depression separately (e.g., Heilemann et al., 2002), the relationships between all three of these
variables among Hispanic females have not been examined utilizing a theoretical framework.

Specific Aims & Abstracts

Limited Research on Hispanic Females’ Perspectives

Aim 1. To describe the experiences that Hispanic women in the community have with substance abuse, violence and risky sexual behaviors from the participants’ perspectives. This aim was accomplished in the study reported in Chapter 2 of this dissertation titled, “Rompiendo el Silencio (Breaking the Silence): Hispanic Women’s Experiences with Substance Abuse, Violence & HIV Sexual Risk Behaviors.” During the first phase of Project DYVA, eight focus groups with a total of 81 women were conducted. A bilingual, bicultural moderator asked women questions relating to substance abuse, violence and risky sexual behaviors within the Hispanic community. Focus groups were audio-recorded, transcribed, translated and analyzed using qualitative content analysis. Participants spoke about substance abuse, violence and risky sexual behaviors interchangeably, often giving the same explanations for all three at one time. IPV was the most salient of the three issues women discussed. Three major themes emerged from the analysis. These included “Transplantadas en otro mundo- Uprooted in another world,” “El criador de abuso- The breading ground of abuse,” and “Rompiendo el silencio- Breaking the silence.” This study supports the importance of addressing cultural issues (e.g., acculturation, machismo) in interventions targeting substance abuse, IPV and HIV among this population and the intersecting nature of these three conditions.
Few Intersection Studies

Aim 2. To describe the relationship between HIV risks, substance abuse and IPV among Hispanic women and their current or most recent intimate partners. This aim was accomplished in the study reported in Chapter 3 of this dissertation titled, “HIV Risks, Substance Abuse and Intimate Partner Violence among Hispanic Females and their Intimate Partners.” In the second phase of Project DYVA, structured interviews with 82 Hispanic women between the ages of 18 and 60 were conducted. Information regarding the participant’s and their partner’s history of sexually transmitted diseases (STIs), substance abuse, risky sexual behaviors and physical and sexual abuse by a current or most recent partner (IPV) were obtained through a sexual history (Peragallo, Gonzalez & Vasquez, 2007) and a Partner Table and Violence Assessment (Peragallo et al., 2007). Chi-square analysis and Fisher’s Exact Test were used to test relationships. Odd Ratios and their respective confidence intervals were also generated to describe the effects these variables had on each other. Relationships between the participant’s history of STIs, their partner’s substance abuse, risky sexual behaviors and IPV were noted. The findings from this study support the importance of targeting HIV, substance abuse and IPV prevention among Hispanics within one integrated framework.

Lack of Theoretically Based Research on Risk and Consequences of IPV

Aim 3. To describe the relationship between resource availability, IPV and depression utilizing the Vulnerable Population’s Conceptual Framework proposed by Flaskerud and Winslow (1998). This aim was accomplished in the study reported in Chapter 4 of this dissertation titled, “Resource Availability, Intimate Partner Violence and Depression among a Community Sample of Hispanic Women.” The Vulnerable
Populations’ Conceptual Framework (Flaskerud & Wislow, 1998) was used to generate hypotheses about the relationships between resource availability (i.e., income, education, employment, health insurance status and self-esteem), IPV and depression among Hispanics. These hypotheses were tested by applying the model to the data collected during the second phase of Project DYVA. In the second phase of the study, cross-sectional questionnaires were administered to 82 Hispanic women between the ages of 18 and 60. Demographic information including individual income, years of education, current employment and health insurance status were obtained. The Rosenberg Self-esteem Scale (1965) and the Center for Epidemiological Studies Scale (CES-D) (Radloff, 1977) were administered to assess for self-esteem and depressive symptoms respectively. A history of physical and sexual abuse by the participant’s current or most recent intimate partner (Peragallo et al, 2007) were obtained and used to assess for IPV. Descriptive statistics were conducted to determine sample characteristics and simple and multiple linear regressions and logistic regressions (i.e., using backward stepwise methods) were conducted to test the hypotheses that were proposed by the applied model. Most of the hypotheses generated from the model were supported. Income and self-esteem (i.e., resource availability) predicted IPV, which in turn predicted depression. Depression predicted lower resources (i.e., less education). The direction in which income predicted exposure to IPV contradicted the model. Although the findings of this study support the use of the Vulnerable Populations Conceptual Framework among Hispanics, the importance of incorporating additional cultural, relationship and social factors within the framework are stressed.
The three studies included in this dissertation have important implications for the health of the Hispanic community living in South Florida and other populations with similar characteristics. They stress the importance of addressing cultural factors such as acculturation, Hispanic stress and machismo in interventions addressing this group, of developing programs that target substance abuse, HIV, and IPV within an integrated framework and of addressing partners and families as a whole. This dissertation also provides a model that researchers, program planners, health providers and policy makers can use when trying to understand how substance abuse, IPV and HIV affects Hispanics and when developing strategies that aim to eliminate the multiple health disparities that inflict this population.
CHAPTER 2: ROMPIENDO EL SILENCIO (BREAKING THE SILENCE):
HISPANIC WOMEN’S EXPERIENCES WITH SUBSTANCE ABUSE,
VIOLENCE & SEXUAL RISK BEHAVIORS

Background

One of the main goals of Healthy People 2010, a set of health objectives that guides efforts to improve the nation’s health, is to eliminate the health disparities found among vulnerable populations such as minorities and women (Department of Health and Human Services, 2006). Hispanics, the largest and fastest growing minority group in the U.S. (U.S. Census Bureau, 2006), are disproportionately affected by morbidity and mortality. Among the health disparities existing within this population are those relating to substance abuse, violence and risks for HIV and other STDs. In fact, some studies have indicated that Hispanics report higher rates of drug and alcohol abuse (SAMSHA, 2005), intimate partner violence (IPV) (Caetano, Field, Ramisetty-Mikler, McGrath, 2005) and sexual risk behaviors relating to HIV/AIDS (CDC, 2007a; 2007b) when compared to non-Hispanic Whites and other minority groups. Despite the high rates of these conditions among Hispanics, research describing the cultural and gender specific experiences of Hispanic women with substance abuse, violence and risky sexual behaviors is lacking.

Although investigators have recommended the use of qualitative methods in increasing our understanding of culturally specific behaviors and phenomena among racial and ethnic minorities (Gonzalez, 2007; Lugo Steidel, Ikhlas, Lopez, Rahman & Teichman, 2002), substance abuse, violence and HIV research targeting Hispanics have been dominated by quantitative studies. By adding qualitative studies specifically
targeting these health conditions among Hispanics to the existing published literature, constructs and relationships established in quantitative studies can be further elucidated by providing a deeper understanding of the underlying phenomena that shape these (Bryman, 1988). The purpose of this study is to understand the experiences that Hispanic women in the community have with substance abuse, violence and risky sexual behaviors from the participants’ perspectives.

Epidemiology

Substance Abuse

According to the most recent National Survey on Drug Use and Health conducted by the Substance Abuse and Mental Health Service Administration (2006) there are ethnic and racial differences in substance abuse rates between groups. In this survey, respondents were asked to report their race (e.g., White, Black, Asian) and if they were of Hispanic ethnicity (i.e., those reporting Hispanic, Latino or Spanish origin). Hispanics had slightly higher rates of substance abuse or dependence (10.0%) than those reporting being non-Hispanic White (9.2%) and non-Hispanic Black (9.0%). Similarly, reported alcohol use among Hispanics (41.8%) was higher than that reported by other ethnic minority groups including Blacks (40.0%), American Indians or Alaskan Natives (37.2%), Native Hawaiians or other Pacific Islanders (36.7%) and Asians (35.4%) (SAMSHA, 2007). Although there are higher rates of substance abuse among Hispanic males when compared to their female counterparts (SAMSHA, 2007), Hispanic women are indirectly affected by their partner’s substance abuse because of its close association with intimate partner violence (IPV) and HIV risk behaviors (Fonk, Els, Kidula, Ndinya-Achola & Temmerman, 2005; Lindenberg et al., 2002).
**Intimate Partner Violence**

Because studies comparing rates of IPV between different racial and ethnic groups have utilized different methodologies (e.g., criminal statistics versus population based surveys) and definitions for IPV (sometimes also called domestic violence, battering and spouse abuse) there is conflicting evidence regarding which groups are at highest risk. While the U.S. Department of Justice’s Bureau of Justice Statistics (2002) reports no significant difference in intimate partner victimization between Hispanic and non-Hispanics, the Violence Policy Center’s Latinos and Firearm Violence studies (2001) reported that Hispanic women in intimate relationships had the highest rates of domestic violence (181 per 1,000 couples) when compared to white (117 per 1,000 couples) and black women (166 per 1,000 couples) (Violence Policy Center, 2001). Studies utilizing population based samples rather than criminal statistics have noted that Hispanics are at higher risk for IPV than other ethnic/racial groups. For example, in a recent study reporting on the five year course of IPV among a nationally representative sample of married and cohabitating White, Black and Hispanic couples in the U.S., Hispanics and Blacks were found to experience more than twice the incidence of IPV (each 14%) when compared to non-Hispanic Whites (6%), even when socioeconomic variables were controlled for. Over the five year period, Hispanics also experienced a higher reoccurrence (i.e., those reporting IPV both in 1995 and 2002) rate of IPV (58%) when compared to Blacks (52%) and Whites (37%) (Caetano, Field, Ramisetty-Mikler & McGrath, 2005). Differences in these statistics may be the results of variation in the methods used to obtain samples and the subsequent characteristics of study participants,
the measures and techniques used to screen for IPV, and the reporting behaviors found
among the different groups compared in these studies.

**HIV/AIDS**

Although Hispanics comprise only 14% of the U.S. population, they contributed
to 18% of the new diagnosed HIV/AIDS cases in 2004. In fact, the HIV incidence rate
among Hispanics is more than three times the rate among whites (CDC, 2007a). When
AIDS rates are stratified based on gender, Hispanic women are found to experience the
biggest risk. While the AIDS rate among Hispanic males (43/100,000) was three times
that of white males (13.7/100,000) in 2001, the AIDS rate among Hispanic females
(12.9/100,000) was over five times that of White females (2.4/100,000) (Latino
Commission on AIDS, 2002). Hispanics are also disproportionately impacted by
HIV/AIDS mortality. A smaller proportion of Hispanics (61%) are alive at 9 years after
their diagnosis than Whites (64%) and Asians (69%) (CDC, 2007a). In fact, while
HIV/AIDS is the ninth leading cause of death for White women between the ages of 35 to
44, it is the fourth leading cause of death among Hispanic women within this same age
category (CDC, 2007b).

**Review of the literature**

Most of the research specifically addressing substance abuse, IPV and HIV risk
behaviors among Hispanic females has been quantitative in nature, estimating the
prevalence, describing the consequences, identifying the risk factors (e.g., Alvarez,
Olson, Jason, Davis, & Ferrari, J.R., 2004; Caetano, Field, Ramisetti & McGrath, 2005;
Field & Caetano, 2003; Peragallo, 1996) and to a lesser degree describing the effects of
interventions targeting behavioral change (Coyle et al., 2004; Flaskerud et al, 1997;
Harvey et al., 2004; Peragallo et al., 2005; Raj, 2001). Fewer studies have described Hispanic women’s actual experiences with these from the “emic” or insider’s perspective (Belknap & Sayeed, 2003; Ortiz, 2005; Peragallo, DeForge, Khoury, Rivero & Talashek, 2002; Talashek, Peragallo, Norr & Dancy, 2004). Qualitative research aiming to describe the experiences of substance abuse and violence has largely focused on Hispanic women’s perceptions and barriers in accessing services relating to these conditions (Trepper, Nelson, McCollum & McAvoy, 2007; Belknap & Sayeed, 2002). On the other hand, qualitative research addressing HIV has focused on describing the experiences of Hispanic women disclosing their positive status (Ortiz, 2005), antecedents to unsafe sexual practices (Talasheck, Peragallo, Norr & Dancy, 2004) and perceptions of important Hispanic community issues related to HIV (Peragallo, DeForge, Khoury, Rivero, & Talashek, 2002).

Although investigators that have taken a qualitative approach to studying substance abuse, violence and risky sexual behaviors among Latinas have contributed significantly in our understanding of cultural factors relating to these conditions, the author has found no qualitative studies that have included a diverse Hispanic population such as the one described in this study. This is important because different cultural and sociodemographic characteristics of Hispanic subgroups within the U.S., may play a major role in shaping their experiences with these conditions. This knowledge is essential in developing culturally appropriate services and programs to target these health issues among communities in the U.S. that are diverse in terms of their Hispanic composition. Additionally, despite the growing body of literature aiming to quantify the intersection between substance abuse, IPV and HIV (Suarez-Al-Adam, M. Raffaelli, M. O'Leary, A,
2000; Newcomb, Michael D. Locke, Thomas F. Goodyear, Rodney K., 2003), few studies have included all three of these targeted health areas under one framework (Geilen et al., 2007).

Methodology

Design

Qualitative research methods were used to understand the experiences Hispanic women have with substance abuse, violence and risky sexual behaviors. Qualitative research is particularly useful when aiming to understand a phenomenon for which little is known, obtaining a detailed view of this phenomenon and when attempting to describe this phenomenon from the participant’s perspective (Creswell, 1998). Focus groups are one of the methods in qualitative research that have been recommended when conducting research with understudied populations and when aiming to generate knowledge that may be culturally rooted (Lugo Steidel et al., 2002). In a focus group, the perceptions of the participants are gathered through a planned discussion that is constructed to explore an area of interest. Certain questions are asked and as participants respond, new ideas and connections from other participants are stimulated (Krueger & Casey, 2000). Qualitative content analysis was utilized to identify and describe the major themes and concepts that emerged from the focus group discussions. Although the qualitative content analysis method is similar to other qualitative methods, such as grounded theory (Glaser & Strauss, 1967) and phenomenology (Colaizzi, 1978), it can be differentiated in that it does not aim to develop a theory or understand the lived experience of a phenomenon. Rather, it is used to develop concepts about the phenomenon under study or build models describing these (Hsieh & Shannon, 2005).
Participants & Setting

Eligibility criteria for the study included self-identifying as being of Hispanic/Latino descent, female, Spanish or English speaking, and between the ages of 18 and 60. Participants were primarily recruited through a community based organization that provides a series of social services (e.g., English classes, career development, child care, parenting, etc.) to Hispanics in South Florida. Snowballing sampling techniques (Miles & Huberman, 1994), in which individuals who were interested in participating in the study were encouraged to inform other Hispanic women in the community about the study, were also used. This recruitment approach is useful when trying to recruit hard to access populations such as this one (Salganik & Heckathorn, 2004). An article about the purpose of Project DYVA was written in the local newspaper during the recruitment phase of the study. Additional candidates contacted the research coordinator after reading the article and were recruited into the study.

Procedures

Approval from the University’s Institutional Review Board (IRB) was obtained prior to the recruitment and data collection for the study. Eight focus groups with a total of 81 participants (8 to 13 participants per group) were led by the same bilingual, bicultural facilitator(s) who reviewed the consent forms with the participants and lead the focus group discussions. Discussions were conducted in Spanish, lasted between 1 ½ and 2 hours and were recorded on a digital audio recorder. Prior to beginning the focus groups, food and refreshments were served for the participating women. This allowed the participants and the facilitators to get to know one another and helped build rapport. It is essential for the focus group facilitator to create a safe and comfortable environment that
promotes the self-disclosure of the participants on a given topic prior to beginning the
discussion (Krueger & Casey, 2000). After the refreshments, the facilitator reviewed and
collected the signed consent forms, emphasized the importance of maintaining
confidentiality, and established ground rules for the focus group discussion. These
ground rules stressed the importance of allowing each other to be heard one at a time, of
respecting each other’s privacy and confidentiality, and the importance of moving
through topics within the allotted time. The facilitator utilized a focus group guide to
initiate discussion. This guide included open ended questions relating to substance abuse,
vioence and risky sexual behaviors (e.g., What are some concerns that women from your
community have with intimate partners?) and probes that elicited more detailed responses
(e.g., What are the circumstances that surround conflicts in intimate relationships?) (see
Appendix A). Participants were only permitted to participate in one focus group and
were paid $50 upon completion. This helped compensate the participants for their time,
travel and child care costs.

Data Analysis

The audio-taped focus groups were transcribed and translated by bilingual study
personnel. After the Spanish transcripts were translated one of the co-investigators
compared the original Spanish transcription to the English translation and revised any
discrepancies. These transcripts were then analyzed using content analysis. Content
analysis is a research technique that allows investigators to make inferences from text or
other media that are valid and replicable. Procedures used in content analysis vary
depending on the purpose of its use (Krippendorff, 2004). Because the purpose of this
study was to describe the experiences of Latina women with substance abuse, violence
and HIV risk behaviors from an “emic” perspective, the conventional qualitative content analysis approach was taken. Conventional qualitative content analysis is appropriate when there is limited research and theories about a phenomenon of interest and the researcher aims to obtain direct information from the study participants without imposing preconceived notions about the phenomenon of interest (i.e., inductive reasoning) (Hsieh & Shannon, 2005). Thus, a naturalistic, post-modern perspective served as the philosophical underpinning guiding the collection, analysis and presentation of the concepts that were relevant to the experiences Hispanic women had with substance abuse, violence and risky sexual behaviors.

Five bilingual, bicultural investigators with prior experience with qualitative research reviewed the seven focus group transcripts, making sure that each transcript was analyzed by two investigators and that every investigator analyzed two or more transcripts. Although investigators reviewed the transcripts in the language they felt most comfortable with (i.e., English or Spanish), each transcript was analyzed by at least one investigator in its original Spanish language. Seven of the eight focus group transcripts (N=72) were included in this analysis. One of the focus groups (focus group # 4, n=9) could not be analyzed because the digital recording file was corrupted and could not be heard. Clear steps for conducting the qualitative content analysis were developed based on the work of experts in the field (Krippendorff, 2004; Flinck, Paavilainen & Astedt-Kurki, 2005; Mayring, 2000) and distributed to five investigators in order to ensure that every investigator was utilizing the same analysis technique (see Table 1).

The first step involved in the content analysis was to review the focus group questions/guide that the facilitator utilized to direct discussion. The investigators then
read through the transcript for the first time without making notes to get a general impression of what was being said. Next, the investigator re-read the transcripts several times, while keeping the focus group questions in mind, and highlighted or underlined significant statements (i.e., meaning units) that related to these. They then clustered these statements into sub-categories and categories, trying to keep these as close to the participant’s own words as possible. In qualitative content analysis significant statements or meaning units are a group of words or sentences that relate to the same central meaning (Baxter, 1991). These meaning units can be grouped together into higher order headings to form categories and subcategories that share a commonality (Krippendorff, 1980; Graneheim & Lundman, 2004). Themes were then built upon these categorizations. In qualitative content analysis themes are defined as the threads of underlying meaning that capture the significant statements, categories and sub-categories on an interpretable level (Graneheim & Lundman, 2003). Differences in opinions among coders were resolved by reflecting on the underlying meanings that categories and themes attempted to capture, linking them to the direct quotations from participants and discussing these until agreement was reached on the appropriate categorizations and themes.

Ensuring Credibility

In qualitative content analysis, the selection of appropriate meaning units, categories and themes that are neither too broad nor too narrow are essential in establishing the credibility of research finding. In order to increase credibility in this method it has been recommended to link direct quotations from participants to categories and themes and/or to seek agreement among the investigators working on the analysis (Denzin & Lincoln, 2000; Graneheim & Lundman, 2004). After reviewing and coding
the transcripts, the investigators met to discuss their findings and came to a consensus about the major categories and themes that emerged. Because similar themes, categories and sub-categories where emerging across the focus groups, there was consensus among the investigators that the loss of one of the focus groups’ digital recording (i.e., focus #4) was not a major concern and the seven existing transcriptions provided sufficient data for a valid qualitative analysis. The development of a content analysis guide, the use of multiple coders, and the discussions clarifying meanings, categories and themes were all techniques that were incorporated into the design of the study that increased the credibility of the findings.

Findings

The participants of the study were diverse in terms of country of origin, socio-economic status, age and years living in the U.S. They represented almost all the countries in Latin America, held a wide range of jobs spanning from housekeeping to attorneys and church ministers, and had lived in the U.S. from a few months to their entire lives. These diverse demographics are characteristic of the heterogeneity of the Hispanics living in South Florida. Three central themes, which were built upon various categories that emerged from the analysis, were identified. These included “transplantadas en otro mundo- uprooted in another world,” “el criadero de abuse- the breeding ground for abuse”, and “rompiendo el silencio-breaking the silence.” Within the overarching theme of “uprooted in another world,” participants described the impact that immigration had on the family, how the more liberal American values influenced the upbringing of their children, how they struggled to maintain their culture, and how their lives were plagued with various forms of discrimination. Within “the breeding ground of
participants discussed various types of partner abuse, their causes and risk factors, the difficulties they encountered in obtaining help, the role that self-esteem played in the victimization process and the cyclical nature of violence. The last theme, “breaking the silence,” was characterized by participants describing the importance of obtaining information about rights and services in the community, the role that paying attention to oneself played in stopping abuse, the value of communicating with partners, children and friends about violence, substance abuse and sex, the importance of breaking cultural norms and taboos and the significance that support played in the process of “breaking the silence.” The three central themes, their respective categories and sub-categories are visually displayed in Figures 1-3.

*Uprooted in another World*

Participants provided rich descriptions of their experiences immigrating to the U.S. and how living in a world where a different language was spoken, customs were practiced and values upheld threatened their communities, cultural roots and personal dignity (see Figure 1). Participants spoke a great deal about how immigrating to the U.S. had directly impacted their families and how they constantly struggled to preserve the integrity of their families amidst a society in which their work responsibilities challenged the time they could dedicate to them. As one woman described:

“It (moving to the U.S.) changes those values that you bring from your country. It changes the family as the base of a society, it is replaced by work and the children that are banished from one’s mind… consequently leaving the children and ourselves in a state of emotional fragility.”

Other women described their fears about their children being raised in a
more “liberal” society where risky behaviors were more acceptable. They related this more liberal lifestyle to an increased risk for substance abuse, violence and risky sexual behaviors. One woman said,

Here, the young people are very liberated. Here, everything is liberal. Here, everything is normal, children leave their homes, they get pregnant, they have sex with other partners, they smoke or take drugs. Like, it is all so normal.

Focus group participants repeatedly spoke about how children in their countries of origin were more respectful than American kids and the importance of maintaining one’s own culture. Many spoke about taking their children back to visit the countries they came from. They viewed this as a technique that helped them preserve the “innocence” of the children, and protected them from the risk of substance abuse, violence and risky sexual behaviors. One woman said,

Taking them (the children) back to my country to study was like going back to my roots of forming the base of what we once had. I was able to see the change in them as innocent children, they reverted to the innocence they once had within our culture.

In addition to the struggle described in trying to maintain one’s culture, participants described the discrimination they faced because of not knowing how to speak the English language. This resulted in discrimination from both Americans and Hispanics that had been in the U.S. for a greater number of years. They also felt discrimination at work. Many of the participants were professionals in their countries of origin and had to assume service jobs such as housekeeping because of not speaking the language. They felt that this experience of having to settle for jobs that they were overqualified for because of language discrimination compromised their integrity. As one woman explained,
…majority of us are professionals in our country that here in this country if we do not speak English, we are nothing… people working, people like lawyers, engineers, these people are working in construction or in the cleaning industry… totally changed their lives not because they want more or less, no, simply because of their language. That is why there is discrimination against us.

The Breeding Ground for Abuse

Although participants discussed issues relating to substance abuse and HIV risks, they concentrated more on IPV, often relating substance abuse and HIV risks back to partner violence. When participants spoke about IPV, they identified its different forms and levels of severity and placed the abuse within a context (i.e., the breeding ground) that included its causes and risk factors, the difficulties in leaving abusive relationships, the role that self-esteem played and its cyclical nature (see Figure 2). When describing the actual types of IPV, special attention was given to psychological forms of abuse. They characterized this type of abuse by describing power and control tactics used by their partners. These tactics varied in level of blatancy, ranging from covert intellectual competition to more overt threats of physical harm. One of the participants was the Pastor of her church and spoke about how her ex-husband, whom was also a Pastor, constantly competed with her in respect to who had the most knowledge. She said:

Let’s see now, intellectual violence has nothing to do with beatings, nothing to do with screaming, it is competitive pressure, it is a competition and especially when both partners are professionals. It is competition based on intellectual power to see who knows more, who wins more, who dominates more, who has more power without even realizing it and behind all of this is a controlling factor that dominates both of you, and who ever decides to get out of this circle is the one that wins.

Another woman described how her partner controlled her mind. She said, “They make you victims, that is, they make you feel like victims as if you where at fault of certain things, they use you and dominate you. There is a thing that is called the mind and
they control it.” Other women spoke about their partners minimizing them and threatening to harm themselves if they would leave them. One woman said, “When I started my divorce procedures, when he made fun of me because I told him, ‘I am divorcing you’, talking about chauvinistic, and he told me not to talk about things that I couldn’t do.” Another woman described how her husband would threaten to kill himself if she left him. The young woman said, “yes, he threatens me, always, he threatens to kill himself, if you leave me I will kill myself, if I leave him, he manipulates me in everyway.”

Women also spoke of physical and sexual forms of abuse. One woman described how her husband beat her when she complained about her son crying all day. She said,

Then he arrived at night. I complained one moment because all day I was with my son and he cried and cried and cried and I was tired…and once again he hit me. When he lifted me, he grabbed me by the neck, threw on the bed and hit me, hit me, hit me…that the next day I woke up crying in the bathroom. I found my arms all bruised.

Sexual abuse was also described as a problem by participants. While some participants described more aggressive forms of sexual abuse such as rape, most spoke about more subtle forms of sexual abuse, such as having sex with one’s husband out of obligation. As one woman described it,

Because there is also something, there are violations between married couples, that the women perhaps that, because your husband obligates you to have sex…And that obligation that they grab you by force to have sex, despite that he is your husband. That is not an obligation, that is abuse.

Participants also spoke about the causes and risk factors for the different types of abuse they described. Machismo was a term that frequently was used by the participants to describe these risks. The “macho”, as they described, had more privileges than the
women and often assumed ownership of their wives. One young Cuban woman spoke about her husband’s perception of ownership when discussing machismo and disclosing physical, sexual and psychological abuse by her current husband, saying,

And he violated me in the most brutal way a woman can be violated. In every way possible that they want to have sex, even if you don’t want to, destroyed and many times bleeding…and he would say, ‘I am your husband, I own you.’

When participants spoke about machismo, they often spoke about its association with infidelity and how this placed them at risk for HIV. One woman began to imitate a “macho” man saying, “I am the male and I can have ten women, and I want those ten without any protection.’ Here American men will not have sex with a woman without protection, but our men, they have sex with whomever…..” Another woman said,

In my case it is the same. He told me that he likes prostitutes. Can you imagine? So many years of marriage and you think about it (to ask him to use a condom) so many years of marriage to come to that, it is distressing. You are the bad one.

It is apparent from these descriptions, that although participants identify condom use as something that would protect them against their partner’s infidelity, they did not feel they had safer sex negotiating power.

Women also addressed substance abuse when sharing their descriptions of machismo and gender inequalities. A woman, whom also spoke as if she were a Hispanic man said, “I want to have a beer to relax,’ and he goes out and drinks his beer until the following day and the woman stays at home putting up with all of this because they want to relax.” Women also described how substance abuse made people do things that they would otherwise normally not do. One woman said, “Because when one uses drugs, one
does things, like that one becomes another person and that makes one do what one would not do with ones five senses."

Participants also linked machismo to gender inequalities that they believed to be intrinsic in their culture. These were so ingrained in them that they believed that women were partly responsible for perpetuating violence by breeding machismo. As one woman said, “the women who have children, males, raise potential machistas. We are, even though the victims of men, also, creators of machismo, so that they go and become aggressive with other women whom will be our daughters-in-laws.” Another woman said, “there is no one else more machista than a women, not even the man…because without even realizing it, we repeat the same pattern of the grandmother, the aunt, the girl, and the generational curse.”

Other risks for abuse included the actual immigration experience, in which women noted that their partners became more aggressive in the U.S., notable age differences between partners, in which having a partner who was significantly older placed one at risk for being victimized, and coming from a family where violence was the norm. Some women shared their belief that IPV was the fault of not only the aggressor, but also the victim. As described by one participant, 

Not only does domestic violence come from the man’s part, but also from the women, above all from Latinas…each chick is after the man, until reaching a point, there are men that are violent just because, but there are women that they bother, they bother that man so much, that they reach a point that they make the man violent, see?

Participants described the various obstacles their community faced in addressing substance abuse, HIV, and violence especially. One of the barriers was lack of information about the nature of these problems, their legal rights and how to access help.
One woman described how lack of information influences parenting in Latino homes. As she shared, “Many of us, the Latinos, tend to lose control of our children because of lack of information.” Some stated not knowing what forms of discipline were allowed in the U.S. and complained about the focus that U.S. had on child abuse. As one woman said,

I think that many of us, Latinos, tend to lose dominion and control of our children because of lack of information. Because the majority of us think that in correcting, in correcting our children in a manner, well convenient, logical, we are putting ourselves in problems, because the first thing that they teach children when they go to school is 911.

Economic barriers were also described as both a risk factor for abuse and a reason why women tolerated abuse from their partners. One woman described how she stayed in an abusive relationship because she had little economic resources. She said, “’and I will not pay you,’ and that’s what he began to tell me, and because I still earned very little, I still do not have the valor to leave because of the economic part.” The economic dependency on their partners was described in countless ways by the participants throughout every focus group.

One of the main reasons why women in abusive relationships did not access help was to conserve the traditional family unit. They focused more on the effects that violence and divorce may have on their children than the effects on themselves. As one woman shared, “I think that sometimes, there are women that do not take the decision and they stay there, for that, to conserve the family.” Another woman said, “One tolerates, tolerates beatings, tolerates maltreatment, tolerates insults, tolerates everything, they say for their children.”

Another barrier was lack of police support. Women described situations in which they contacted the police for domestic violence and received no support. They believed
that a woman had to be seriously injured before they took action. As woman said, “you have to be seriously injured, bleeding for them (the police) to give you attention.” One woman described a situation when she went to the police and they told her, “No woman, we can do absolutely nothing. You are not bruised, you do not have blood.”

A major barrier to accessing services when one was in an abusive relationship was being of undocumented legal status and the risk of not obtaining legal status if one divorced a “legal” abusive partner. One woman said,

> There is a very serious problem and it’s that they are at a point of obtaining their legal papers and then she can’t separate herself from him because then what happens to her papers? You understand me? It is not a conflict that can be resolved, to say, ‘see you later, I am leaving you partner and this is it, no, you have to hold on.’

Self-esteem was an important category imbedded in the breeding ground for abuse, identifying it as a risk for, a consequence of and part of the processes involved in abuse and risky behaviors. As one of the younger participants explained, “When you don’t love yourself, you allow people to step all over you, and when people step all over you, you can fall into drugs… your self-esteem is so low, you can fall into domestic violence and fall into sexual abuse.” Women also described how abusive partners worked on lowering their victim’s self-esteem. One woman said, “Because men always know how to prepare the scene and they start by lowering your self-esteem.” Another woman also said,

> Because many times the abuser is so intelligent, so controlling and so manipulative, that he shows a different side of himself in public and he portrays you as the bad one and not himself…your self-esteem is lowered, so low that you don’t value yourself anymore.

Lastly, participants described the abuse as a cycle that escalated in severity over time, and was transmitted in various ways (i.e., from the perpetrator to the victim, to the
perpetrator’s children and to the community). One woman described how she became violent after years of victimization. As she stated, “because he was aggressive and I became aggressive, and one day he went to hit me and I got a knife and I told him, ‘Leave, leave, that I am going to kill you.’ And I was going to kill him. I was going to kill him. I was crazed.” Another woman described her concern about the example her abusive situation was giving her children. She explained,

And when I found myself in a difficult situation, I said, I can’t leave this example for my children, especially her because she is a woman, because her example, her image is of me, and also for my little one (her son), because he is going to think that his father is perfect, and he is going to do the same.

Another woman described how violence at home turns into community violence and then returns back home. As she described,

I have an experience that violence starts at home and then travels to schools and to the streets and returns back home, that has been proven that violence starts in the home. A kid goes to school, the kid is violent in school and goes on to be violent in the street and he goes home and continues to be violent at home, it is a cycle.

Rompiendo el Silencio - Breaking the Silence

Participants repeated “rompiendo el silencio,” numerous times during the focus group discussions when referring to breaking the cycle of abuse and breaking cultural norms and taboos (see Figure 3). In order to break the silence, they highlighted the importance of having access to information about their rights in the U.S. and how to access services in the community, especially if they were undocumented. They also highlighted the importance of knowing where to go for help. This was crucial to their success in the U.S. As one woman put it, “I don’t know what to invent so that when a Latino comes to this country they know where to go, to be able to orient them in where to
go. So that they know a path to..., because depending on the path or whom they know, that will be how it will go for them.”

Paying more attention to oneself was an important aspect involved in being able to “break the silence.” This included paying more attention to one’s physical appearance, following their own intuitions and fostering their own independence. One woman described the day that she decided to leave her abusive relationship. She described,

Then, I took a day. I sat down and asked myself, okay; I looked at myself in the mirror, ‘What is it that you want from life? You want your life or to continue in this relationship or that he comes one day and kills the son or kills me? Or you want to change your life?’ And that was it. I took the decision. I got my bags, got everything. I took them out. I called him on the telephone. He didn’t answer. I called his sister and I told her, ‘come get his stuff because I will take him out with the police. I am no longer scared. You understand me?’

Part of breaking the silence is also increasing effective communication between partners. Some participants described their belief that if there is good communication between partners and problems is addressed as soon as they arise, abuse will never result. As one woman said, “If you have good communication, you will never get into a situation. You will never get into domestic violence.” Part of partner communication was being able to break the silence behind sex and being able to negotiate condom use. Participant’s expressed concern about the possibility of their partners being unfaithful and how they were embarrassed to ask them to use condoms. One participant expressed concerned about her sister whom had a husband that was being unfaithful to her. She said, “My sister says that after twelve years of marriage how can she ask her own husband that he has to use condoms? No!”

It was also important for participants to increase communication to children in order to break cultural taboos and norms. One woman described how she decided to
break the silence that she experienced as a child and talk openly to her daughter about important taboos such as sex. She said,

> I married very young and I came from a professional family household, nevertheless, they never talked to me about anything of this, I don’t want to repeat this pattern, so I talk to my daughter, she is a Christian and she has another point of view, different from other girls, I think that you must talk to your daughters openly and with all sincerity on how things are.

Another woman talked about how her mother took the decision to break the cultural norm of abuse in her household. As she described, “I decided to break the pattern, break the pattern, my family is full of domestic violence, abusive men that beat. My mother decided, and those are the words that are engraved in me from my mother.”

Participants also stressed the importance of receiving support from others and having access to services when making the decision to break the silence. One of the older participants of the focus group said, “The woman, so that she can decide (to leave an abusive relationship) needs someone to take her and tell her, ‘aren’t you aware of what is happening?’ But when someone says I will help you, that is the most beautiful word.”

One young Colombian woman spoke about how the advice from others helped her take the decision to leave her abusive husband. She was undocumented, and in addition to the fear of being abused by her husband, she was concerned about being deported. As she stated, “and when I went to a place, they told me, because I was scared. At that moment I was illegal and was scared. And people told me, ‘don’t be afraid because the women that shut their mouths are the women who die.” Another woman shared with the group what her psychologist told her, “‘Make use of whatever self-esteem you have left and get out of there.’” Faith in God also played an important role in helping women overcome their abusive situations and begin the healing process. Once women spoke about how her son
took her back to church and how this helped her overcome her situation. She said, “My son has taken me to the church, that has calmed me, I went through many things, well I have been through everything, and because of God I am now on another path.” Support from friends, professionals and God all helped these participants to make the final decision to “break the silence.”

Discussion

The major themes that emerged from the focus groups, “uprooted in another world,” “the breeding ground for abuse,” and “breaking the silence,” and their respective categories and subcategories provide a rich description of the experience that Hispanic women have with substance abuse, violence and risks for HIV. Many of the findings of this study are supported by the work that others have reported in the literature. In a study conducted by Belknap and Sayeed (2003), investigators explored the thoughts and feeling of abused Mexican American women regarding being asked about domestic violence by a health care provider (screening) using an ethnonursing methodology. They found that the participants were open to being asked about their histories of abuse if they felt that their health care provider was sincerely present, asked about other aspects of their lives, listened to their responses and assisted them in connecting with IPV community services. This was consistent with our experience that women were open to disclosing intimate life details about their abuse and stressed the importance of having someone present in helping them break the silence surrounding it. Kasturirangan and Williams (2003) explored the experiences of Hispanic female victims of IPV with the purpose of outlining the specific needs of this population to counselors. The main domains they identified included the misperception of the “typical Hispanic female,” cultural experiences in the
U.S., the influence of traditional gender roles in their upbringing, the perception of family support, reasons for staying with and leaving the abusive partner and their desired characteristics of the type of counseling and counselor they wished to have access to. These are consistent with our findings as participants described the difficulties they encountered living in the U.S. (i.e., uprooted in another world), the role that machismo and gender inequalities played in IPV, substance abuse and HIV risks and the countless obstacles they encountered in accessing help (i.e., the breeding ground for abuse).

Peragallo and colleagues (2002) focused on identifying cultural factors that related to HIV prevention among a group of Mexican and Puerto Rican women and identified similar themes. Socioeconomic and cultural inequalities, machismo and marianismo, lack of knowledge about HIV and a history of abuse were identified by women as risk factors for HIV. In this study, participants also reported lack of support and services (i.e., socioeconomic and cultural inequalities) and machismo and infidelity as risk factors for IPV and HIV. There appears to be reemerging themes found among qualitative research conducted with Hispanic females, despite the specific questions posed by the investigators and samples included. These themes include cultural factors relating to gender inequalities (or sometimes called machismo), the stress associated with living within a different culture, the importance of the family, and a wide range of barriers encountered in accessing help, whether it be due to lack of information, inadequate culturally appropriate services or socioeconomic factors.

While there seems to be similar cultural experiences encountered among Latino women across demographic characteristics, there are unique themes and categories identified in this study that need to be highlighted. The participants of this study were
more concerned with issues relating to violence than substance abuse and HIV risks. They also paid particular attention to psychological forms of abuse, describing the conflict that occurs in regards to who has the most knowledge among partner when both are professional (intellectual abuse) and the role that manipulation and control tactics play in this plight. Although the participants did not stress their own substance abuse and HIV behaviors throughout the discussion, they did focus a great deal on their partners’ promiscuity and risky behaviors, tying machismo and gender inequalities to their own risk for IPV and HIV. Additionally, although specific questions about the relationship between substance abuse, violence and risk for HIV were not asked, participants could not speak about one of these areas without bringing up the others. For example, participants identified substance abuse when describing acculturation stress and their child’s risks in a more “liberated” American society, when describing machismo, infidelity and gender inequalities, and when describing their risks for HIV. However, this group of participants appeared to be less acculturated to the U.S. culture. This is supported by the fact that although focus groups were offered in English, the participants preferred to participate in Spanish speaking groups. Additionally, as noted in one of the major themes (uprooted in another world), most of the participants were still dealing with issues relating to their immigration experience and finding a balance between the two cultures. Perhaps if another geographical area was targeted that included more highly acculturated Hispanic females, which have been documented to have higher rates of substance abuse and HIV risk behaviors, a higher representation by Hispanic sub groups with higher rates of substance abuse, then perhaps the participants would have focused
more attention to their personal substance abuse and HIV risk behaviors and other types of IPV.

Despite the fact that a great deal was learned about the experiences of Hispanic women with substance abuse, violence and risky sexual behaviors, this study has numerous limitations that must be considered. First the focus groups consisted of a convenience sample of Hispanic women. Therefore, the findings may not represent the experiences of other Hispanic women in South Florida or in other areas of the U.S. Additionally, because many of the participants may have known one another other (e.g., as a result of snowball sampling), they may have felt embarrassed talking about the sensitive issues that were discussed. In order to encourage participants to feel more comfortable discussing these topics openly, the facilitator started each focus group by stating that participants did not have to disclose their personal experiences, but rather speak about the experiences of Hispanic women in the community in general. However, as supported by the rich descriptions that emerged from the groups, it is evident that many participants did feel comfortable sharing their own personal experiences with others. The focus group methodology is further threatened by the potential of having one or more participants dominate and lead the discussion. This may cause other less vocal members of the group feel inhibited in sharing their views and opinions. The facilitator helped guard against this by warning participants that she may have to limit the time that participants spoke in order to ensure that everyone was heard.

Implications

This study contributes to the current state of knowledge by providing an in-depth analysis of the experiences of a diverse group of Hispanic women with regard to
substance abuse, IPV and risk for HIV as described from their own perspectives. Although participants concentrated more on their experiences with IPV, they could not discuss their experiences with violence without also talking about substance abuse and risks for HIV and other STDs. This supports the need to conduct more research describing the intersection between these three health conditions and develop and evaluate interventions that target these conditions among Hispanics within one framework. As the theme “uprooted in another world” implies, the experience of living in the U.S. where the predominant culture is different than one’s own can not be separated from the experiences that Hispanic women have with substance abuse, violence and risky sexual behaviors. Therefore, cultural issues relating to the impact that moving to the U.S. has on the family, their cultural values and their experiences with discrimination need to be addressed in research, practice and programs targeting this group. The theme, “breeding ground for abuse,” can specifically be used for designing research studies that explore risk and protective factors for IPV among Hispanic women and for the development of prevention and treatment programs that target specific cultural (e.g., machismo and gender inequalities) and environmental factors (i.e., lack of support services) that may place a Hispanic woman at risk. Because one of these risks appears to be their partner’s behaviors, prevention efforts targeting women can be more successful if they also address men. The last theme, “breaking the silence,” provides providers and researchers with clues to what type of strategies can be used when providing care to victims of violence and women at risk for substance abuse and HIV (e.g., providing information about rights and community services, promoting independence), how to promote communication about these issues (e.g., teaching parent how to discuss issues
with children and partners), what cultural norms need to be broken (e.g., teaching mothers how to not raise “machistas”) and what type of support is needed (e.g., access to someone that can connect IPV victims to support services).
CHAPTER 3: HIV RISKS, SUBSTANCE ABUSE AND INTIMATE PARTNER VIOLENCE AMONG HISPANIC FEMALES AND THEIR INTIMATE PARTNERS

Background

Among the biggest health disparities impacting the Hispanic population in the U.S. today is HIV/AIDS and associated conditions such as substance abuse and intimate partner violence (IPV). In 2005 the HIV/AIDS incidence rate for Hispanics (71.3 per 100,000) was more than four times the rate for Non-Hispanic Whites (27.8 cases per 100,000) (Center for Disease Control & Prevention [CDC], 2007a). Although rates of HIV/AIDS are much higher among Hispanic males than females, when stratified based on gender and compared to Non-Hispanic Whites, Hispanic females are found to experience a greater disparity than their male counterparts. In 2005, while the rate of new HIV/AIDS cases among Hispanic males (56.2/100,000) was three times that of Non-Hispanic White males (18.2/100,000), the rate among Hispanic females (15.8/100,000) was over five times higher than that of Non-Hispanic White females (3.0/100,000) (CDC, 2007a).

Heterosexual contact is the most frequent (69%) mode of transmission for HIV/AIDS among Hispanic women (CDC, 2007a). Consequently, when targeting HIV prevention among Hispanic women it is important to address the various factors associated with high risk sexual behaviors within their intimate relationships. Substance abuse and intimate partner violence (IPV) are two important factors that may be inherently linked to HIV risks among this population. Project DYVA (Drogas y Violencia en las Americas- Drugs and Violence in the Americas), was a pilot research
study that aimed to explore HIV risks, substance abuse and violence among a community sample of Hispanic women in South Florida through the use of both qualitative (Phase I) and quantitative research methods (Phase II). In this paper, the results from the second, quantitative phase of the study will be reported.

**Intersecting Health Conditions**

*Substance Abuse and HIV among Hispanics*

Substance abuse is related to HIV/AIDS in that it not only increases an individual’s risk of being exposed to the virus through direct contact with a contaminated needle when intravenous drug use (IDU) is involved, but it also increases an individual’s likelihood of engaging in high risk sexual behaviors such as unprotected sex (Edlin et al., 1994; Leigh & Stall, 1993; Santibanez, Garfein, Swartzendruber, Purcell, Paxton et al., 2006). Substance abuse appears to disproportionately affect Hispanics in the U.S. In fact, in the 2004 National Survey on Drug Use and Health, it was noted that drug abuse and dependence among Hispanics (9.8%) were higher than Whites (8.3%) (Substance Abuse and Mental Health Service Administration [SAMHSA], 2005). Similarly, reported alcohol abuse among Hispanics (40.2%) was higher than that reported by other ethnic minority groups including Asians (37.4%), Blacks (37.1%) and American Indians or Alaskan Natives (36.2%) (SAMHSA, 2005). Although there are higher rates of substance abuse among Hispanic males when compared to their female counterparts, Hispanic women are indirectly affected by their partner’s substance abuse because of its close association with the perpetration of IPV and risk for HIV (Caetano, McGrath, Ramisette-Mikler & Field, 2005; El-Bassel et al., 2007; Fonk, Els, Kidula, Ndinya-Achola & Temmerman, 2005; Lindenberg et al., 2002).
**Intimate Partner Violence (IPV) and HIV among Hispanics**

In a recent study reporting on the five year course of IPV among a nationally representative sample of married and cohabitating couples in the U.S., Hispanics were found to experience more than twice the incidence of IPV (14%) when compared to Whites (6%), even when socioeconomic variables were controlled for (Caetano, Field, Ramisetty-Mikler & McGrath, 2005). The term intimate partner violence (IPV) is used to describe physical, sexual and/or psychological abuse or harm committed by a current or former intimate partner (i.e., current or former spouse or boyfriend/girlfriend) (Centers for Disease Control & Prevention, 2007b). Recent studies examining the relationship between IPV and HIV have noted that male-to-female IPV is associated with numerous risk factors for HIV (Geilen, Burke, Mahoney, McDonnell, & O’Campo, 2007). In fact, women reporting victimization by an intimate partner are more likely to report a STI (Bauer et al., 2002), inconsistent condom use, and forced sex without a condom (El-Bassel et al., 2007; Raj et al., 2006). They are also more likely to report engaging in sex with a HIV-infected partner or an IDU, having multiple partners and injecting drugs (El-Bassel et al., 2007). Research that has aimed to understand the mechanism through which IPV increases a woman’s risk for HIV have documented that abused women fear insisting that their partners use condoms (Suarez-Al-Adam, Raffaeilli & O’Leary, 2000), and report sexual control by their male partners (Raj, Silverman & Amaro, 2004). High rates of HIV among Hispanic women may be driven in part by the fact that they are more likely to be exposed to IPV (Caetano, Field et al., 2005). Socioeconomic stressors that disproportionately affect the Hispanic population in the U.S. (U.S. Census Bureau, 2008) may partly explain why the rates for IPV among Hispanics are higher than other
racial/ethnic groups (Kantor, Jasinski & Aldarondo, 1994; Tjaden & Theonnes, 2000). Additionally, cultural values sanctioning wife abuse that has been documented among certain Hispanic sub-groups (e.g. Puerto Ricans) may provide an additional explanation for higher rates of IPV among this population (Kantor et al., 1994; Torres, 1998).

**Substance Abuse and IPV among Hispanics**

Substance abuse practices within relationships and its association to IPV victimization and perpetration has been extensively studied among Hispanics (Caetano, Schafer, Clark, Cunradi & Raspberry, 2000; Field & Caetano, 2003; Lipsky, Caetano, Field & Barzargain, 2005; Perilla, Bakeman & Noris, 1994). The results from these studies indicate that substance abuse may not play the same role among Hispanics as it does among other groups. For example, in a study comparing drinking patterns among victims of IPV across different racial/ethnic groups, the rates of drinking among Black victims (23.6%) and White victims (11.4%) were significantly higher than among Hispanic victims (5.4%) (Lipsky et al., 2005). In another study examining ethnic and racial differences among a probability household sample of White, Black and Hispanic couples, it was found that female alcohol abuse was a predictor of IPV victimization among White and Black females but not for Hispanic females. However, alcohol abuse by their Hispanic male partners predicted the perpetration of IPV (Field & Caetano, 2003). Other studies have noted that, just as with other racial and ethnic groups, male alcohol and illicit drug use is associated with male-to-female IPV (Caetano, Cunradi, Clark & Schafer, 2000; Perilla et al., 1994). Although drinking during violent episodes has been found to be as common among Hispanic males as among non-Hispanic White and Black males (Caetano et al., 2000), the approval of marital aggression resulting from
alcohol abuse is higher among Hispanics than both Blacks and Whites (Field, Caetano & Nelson, 2004). Among Hispanics it appears that IPV is more closely associated with the male partner’s substance abuse practices and beliefs than the female’s.

Gaps in the Literature

Despite the growing body of literature aiming to quantify the intersection between substance abuse, IPV and HIV (Suarez-Al-Adam et al., 2000; Newcomb, Locke, & Goodyear, 2003), few have explored the relationships between these three conditions among Hispanics. Those that have (Moreno, 2007; Raj et al., 2006, Raj et al., 2004) have focused on Hispanics in the Northeastern part of the United States. Findings from these may not be generalizable to Hispanic women in South Florida who may be different in regards to their countries of origin, socioeconomic situations, acculturation levels, cultural practices and beliefs and other environmental conditions that shape their experiences as Hispanics living in the U.S. Further, in a recent literature review of studies describing the intersections between HIV and IPV, the importance of including substance abuse as a third, interwoven health issue, was stressed (Geilen et al., 2007). Despite this recommendation, there are only a few studies that have explored the relationship between HIV risks, substance abuse and IPV within one integrated framework and in a culturally diverse Hispanic population.

Conceptual Framework

The conceptual framework that was used for this study was adapted from a framework developed by the institution funding this study, the Inter-American Drug Abuse Control Commission, Organization of American States (CICAD, OAS). The original framework, which aimed to conceptualize the intersection of violence and
substance abuse among Hispanic women in the Americas (Wright, 2006), was adapted to also include HIV risk as a major interwoven issue and to identify the specific variables that would be used to define HIV risks, substance abuse and IPV in this study (see Figure 4). HIV risks were conceptualized as consisting of both the participant’s risks (i.e., consistent condom use and history of STIs) and the partner’s risk (i.e., IDU, and having sex with other men, prostitutes/commercial sex workers [CSWs] or IDUs). Substance abuse was also conceptualized as the participant’s and her partner’s alcohol and drug use surrounding sexual intercourse. Finally, IPV was conceptualized as the woman reporting a history of physical and/or sexual abuse during her current or most recent intimate relationship. The following research questions guided the examined relationships between HIV risks, substance abuse and IPV:

1. What is the relationship between being under the influence of alcohol or drugs during sexual intercourse and HIV risks?

2. What is the relationship between IPV and HIV risk?

3. What is the relationship between being under the influence of alcohol or drugs during sexual intercourse and IPV?

Methodology

Design

Project DYVA was a pilot study that explored HIV risks, substance abuse and IPV among Hispanic community women in South Florida through both qualitative (phase I) and quantitative research methods (phase II). This paper reports on the quantitative phase of the project, in which questionnaires were administered to 82 participants in a structured face-to-face interview format and in the respondent’s preferred language of
either English or Spanish. The instruments were translated to Spanish using translation and back translation and reviewed for accuracy by a certified translator. All data was collected between June and October, 2006.

Sample and Setting

In order to be eligible for the study, candidates had to self-identify as Hispanic or Latino, female, and between the ages of 18 and 60. Participants were recruited into the study by posting flyers at a community based organization (CBO) that provides a wide-range of services to Hispanics and other immigrants (e.g., English classes, career counseling, parenting courses), from employees of this CBO promoting the study, and from a local newspaper article about the project. Candidates were informed that Project DYVA was a study that aimed to learn about the experiences of Hispanic women in the community with sexual behaviors, substance abuse and violence. Snowball sampling methods (Miles & Huberman, 1994), in which individuals who were interested in participating in the study were encouraged to inform other Hispanic women in the community about the study, were also used

Procedures

Approval from the university’s Internal Review Board (IRB) was obtained prior to conducting any participant activities. Signed informed consent was obtained from all study candidates prior to their participation in the study. The consenting process and the administration of the questionnaire took approximately 1.5 hours to complete and were administered by one of the co-investigators of the project or a trained graduate assistant. All those administering the questionnaire were female, bilingual and bicultural.
Participants were paid 50 dollars in cash upon the completion of the interview to compensate them for their time, travel and child care arrangements.

**Measures**

The measures reported in this study were selected from the larger battery of measures that were administered in Project DYVA. The selection of these measures was based on the work of Peragallo and colleagues (2005) who originally developed the interview to evaluate the efficacy of a HIV risk reduction intervention that also addressed IPV among Hispanic women. The original set of questionnaires was adapted to better meet the needs of Project DYV by eliminating some of the questions relating to HIV and adding more questions relating to violence and substance abuse (Peragallo, Gonzalez & Vasquez, 2007). Because the measures used in this study have not been described in detail elsewhere, we will begin by describing these broadly, according to the names of the measures, and then will specify the variables within these measures that were used to measure HIV risks, substance abuse and IPV.

**Demographic Section.** This component of the questionnaire was administered at the beginning of the interview. Participants were asked to report their age, the number of years that they had lived in the U.S., their country of origin, civil status, whether they were currently living with a partner, the number of children that they had, the number of children that lived with them, their religion and religiosity, education, employment, individual and household income, and health insurance status.

**The Bidimensional Acculturation Scale.** The Bidimensional Acculturation Scale (BAS) (Marin & Gamba, 1996) was used to assess acculturation. This tool consists of 24 questions regarding the participant’s English and Spanish language behaviors and
customs in three domains: general language use, language proficiency, and language use in media. These domains are assessed within two sub-scales (i.e., the Hispanic and non-Hispanic subscale), with each subscale containing 12 questions. Responses for each of these question range from 1 (almost never) to 4 (almost always). A higher score on the Hispanic and non-Hispanic subscales is indicative of a greater level of cultural activities for that particular domain. A mean score of $\geq 2.5$ for both the Hispanic and the non-Hispanic subscales is indicative of biculturalism. High internal consistency has been reported for the BAS (Marin & Gamba, 1996; Peragallo et al., 2005). In this study the BAS as a whole demonstrated good reliability (Cronbach’s $\alpha = .80$). However, the non-Hispanic sub-scale performed much better (Cronbach’s $\alpha = .90$) than the Hispanic sub-scale (Cronbach’s $\alpha = .68$).

**Sexual History.** The Sexual History (Peragallo et al., 2007) included five major questions regarding the participant’s contraceptive use during the last three months, reasons for not using contraception (i.e., if the participant reported no use), history of HIV testing and history of STIs (see Appendix B). Information regarding the participant’s history of STIs was collected in a table that included rows with the names of different STIs (e.g., syphilis, HIV, chlamydia, herpes) and columns specifying the time of diagnosis (i.e., within the last three months, within the last year and ever) and the number of times they were diagnosed with the identified STI. Because the Sexual History questionnaire included general screening questions that were not scaled, no psychometric properties can be reported.

**The Partner Table.** The Partner Table (Peragallo et al., 2007) was developed to collect detailed information regarding HIV risks, substance abuse and IPV occurring
within the participant’s past five sexual relationships (see Appendix C). First, participants were asked to report the number of sexual partners they had in their lifetimes, specifying the number of male and female partners. They were also asked to report the number of sexual partners they had in the past three months and the number of sexual partners that had forced them to have sex. The participants were then asked to recall their last five sexual partners, starting with their current or most recent partner (i.e., if they were not currently in a sexually active relationship) and working backwards. If the participant only had one partner, then information was just collected for that one partner. However, if the participant had more than five partners, then information was collected for the participant’s past five partners only.

Each column of the table represented a partner. For example, the first column represented the participant’s current or most recent partner and the second column represented the previous one. The rows consisted of thirty four questions regarding the relationship with the participant specified in the column. These questions asked participants to report this partner’s gender, their ages when the relationship began, the duration of the relationship, this partner’s ethnic background, sexual practices that occurred throughout the relationship (i.e., vaginal, oral and anal sex and respective condom use), substance abuse practices surrounding sexual intercourse (i.e., participant and/or partner having sex while under the influence of alcohol and drugs), this partner’s alcohol and illicit drug use during the relationship, partner’s screening behaviors for sexually transmitted infections (STIs), and behaviors that placed them at risk for HIV and other STIs (i.e., sex with other men, with prostitutes/CSWs and IDU). Questions regarding sexual (were you ever forced to have sex with this partner?), physical (did your
partner hit or hurt you in any way?) and psychological abuse (did your partner scream at you in a frightening way?) perpetrated by the partner and subsequent help-seeking behaviors were also included. Because the Partner Table utilized screening questions relating to multiple domains including HIV risks, substance abuse and IPV, most of which included less than three questions, psychometrics could not be calculated.

*The Violence Assessment.* The Violence Assessment (Peragallo et al., 2007) includes 9 questions relating to community violence and abuse during childhood and adulthood (see Appendix D). The first three questions relate to community violence. Participants were first asked if they had lost family or friends because of a drug overdose, gang violence, homicide, HIV/AIDS or suicide. Information on the participants’ relationship to the deceased, their age, gender and cause of death were recorded. Participants were also asked if they or anyone close to them were ever part of a gang. The next six questions related to child and adult abuse. In these questions, they were asked if they were ever physically (were you ever physically abused?), sexually (were you rape or sexually abused?) and/or psychologically abused (were you verbally or emotionally abused?) as a child or adult. These questions allowed participants to self-categorize as being victims of sexual, physical and psychological abuse and allowed participants to describe the abuse in their own words. For any positive responses to these questions, detailed information about the participant’s and perpetrator’s age when the abuse started and finished, the perpetrator’s relationship to the participant (e.g., partner, uncle, coworker), their gender and ethnicity, and a description of the abuse was collected. As with the Partner Table, no psychometric properties can be reported for this scale. However, there was a high level of agreement between the participants’ responses to the
two questions relating to sexual (98.7%) and physical (96.3%) abuse by current or most recent partner that were obtained from the Partner Table and the Violence Assessment.

Variables

*HIV Risks.* Both the participants and their partners HIV risks were assessed. The participant’s responses to the Sexual History (Peragallo et al., 2007) were used to determine if the participant had a history of STIs. Participants responding positively to having at least one of the STIs included in Sexual History at any point in their lifetime were identified has having a positive history of STIs. The rest of the HIV risks were obtained from the first column of the Partner Table (Peragallo et al., 2007) in which information about participant’s current or most recent relationship was obtained.

Participants were asked to report how often a condom was used during vaginal sex with her current or most recent partner. Response categories were dichotomized as consistent (i.e., always using condoms) and inconsistent condom use (i.e., using condoms sometimes or never).

Information regarding the participant’s partner risk for HIV was also obtained from the first column of the Partner Table. Participants were asked if their current or most recent partner had a history of STIs. The responses to these question included “yes,” “no,” or “don’t know.” Because many of the participants suspected that their partners may have had an STI but did not know for sure, responses were dichotomized into a positive or suspected category (“yes” or “don’t know”) and a negative category (“no”). This classification is appropriate because the lack of knowledge regarding a partner’s STI history and risk behaviors is an established risk factor for HIV among women (CDC, 2007c; Hader, Smith, Moore & Holmberg, 2001). Similarly, participants were asked to
report if this partner had ever injected drugs (IDU), had sex with other men, had sex with a prostitute/CSW, or sex with an IDU. Responses to these questions included “yes,” “no,” or “don’t know.” As with the question regarding their partner’s history of STIs, participants regularly responded that they suspected these behaviors but were unsure. Consequently, the responses to these questions were dichotomized into a positive/suspected category (“yes” or “don’t know”) or negative category (“no”).

Substance Abuse. The first column of the Partner Table (Peragallo et al., 2007) was also used to assess alcohol and drug use during sexual intercourse. Specifically, participants were asked how often they had sex while they were under the influence of alcohol and/or drugs. They were also asked how often they had sex while their partner was under the influence of alcohol or drugs (i.e., never, almost never, occasionally or almost always). Responses to the alcohol and drug use questions were combined into one substance abuse variable and dichotomized into frequent (always or occasionally being under the influence of alcohol or drugs) or infrequent (rarely or never being under the influence) use during sexual intercourse. Therefore, participants reporting frequent substance abuse during sexual intercourse (x = 1) were compared to those reporting infrequent substance abuse (x = 0). Similarly, participants who reported having a partner who frequently abused substances during sex (x = 1) were compared to participants reporting having a partner who did not use or did so infrequently (x = 0).

IPV. IPV was measured through self-reported abuse that was perpetrated by the participant’s current or most recent intimate partner. Any positive responses to the IPV questions relating to sexual and physical abuse in the Partner Table or in the Violence Assessment, in which the participant’s current or most recent partner was identified as the
perpetrator, were used to identify those who had been victims of IPV. Individuals that reported being a victim of psychological abuse without reporting physical or sexual abuse were not included because the question regarding psychological abuse in the Partner Table (e.g., did you partner scream at you in a frightening way?) was less specific than the questions for the other types of abuse. Consequently, those reporting sexual abuse and/or physical abuse (x = 1) were compared to those who did not report sexual or physical abuse (x = 0).

Analysis

Prior to exploring the relationship between HIV risks, substance abuse and IPV, descriptive statistics of the sample were generated. Differences among various demographic variables (i.e., age, years in the US, years of education and individual monthly income) and acculturation between participants reporting major high risk behaviors for HIV, substance abuse and IPV (i.e., inconsistent condom use, substance abuse during sexual intercourse, and a history of IPV) and lower risks (i.e., consistent condom use, infrequent substance abuse during sex and no history of IPV) were examined using independent sample t-test analyses. Although examining group differences was not a primary aim of this study, this information would be used to understand differences between high risk and lower risk participants and hence to generate hypotheses for why the conditions under study may be related. Pearson’s chi-square analysis and Fisher’s Exact Tests (FET), when more than 20% of the frequencies within cells were less than five (Altman, 1999, p. 253), were conducted to test relationships between HIV risks, substance abuse during sexual intercourse and IPV. Contingency tables and crude odds ratios (OR) with their respective 95% confidence
intervals were also generated. All dichotomized variables included in this analysis compared the high risk group (e.g., participants with a history of STIs, reporting frequently being under the influence of alcohol or drugs during sex) to the lower risk group (e.g., no history of STIs, infrequent or no substance abuse surrounding sex). These analyses were conducted on SPSS version 15.0.

Results

Characteristics of current sample

Participants were diverse with respect to their age and socioeconomic situations (see Tables 2 and 3). They represented 12 different countries, with the greatest proportions being born in Colombia (47.6%), Venezuela (13.4%) and Ecuador (8.5%), and had spent an average of 9.31 years in the U.S. ($SD = 8.26$). Only two women (2.4%) participating in the study were born in the U.S. While all the participants scored over the cut-off score for the Hispanic acculturation subscale of the BAS (100%), only 35.4% scored over the cut-off in the non-Hispanic acculturation subscale. This indicated that while all the participants remained highly acculturated to their culture of origin, only slightly over a third were highly acculturated to the U.S. culture, and hence considered bi-cultural. Most participants were currently employed (59.8%) and had a low monthly and household income (see Table 2), placing 24% of the participants and their families below the poverty threshold for 2006 (U.S. Census Bureau, 2007). Despite their low employment rates and income, they had relatively high level of education, with 87.8% reporting graduating high school and 42.7% graduating from a university. Only 26.8% of the sample had access to private or public insurance. The remainder of the participants paid their health care out of pocket. Some women (19.5%) reported not having ever
accessed health care in the U.S. The majority of participants were married (54%) and/or currently living with a partner regardless of their marital status (64.6%). They had an average of just over 3 lifetime sexual partners ($M = 3.21, SD = 3.09$) and just under one partner in the last three months ($M = .74, SD = .44$). Two participants (2.4%) reported never having an intimate partner and were therefore not included in the analyses.

Fifteen percent of the participants reported having at least one STI during their lifetime and 42.7% reported either having a partner with a positive or suspected history of STIs. Slightly over 25% of participants reported that they were frequently under the influence of alcohol during sexual intercourse (26.3%). Similarly, slightly over 25% reported having a current or recent partner who was frequently under the influence of alcohol during sex (27.5%). The occurrence of being under the influence of drugs during sexual intercourse was much lower for participants than their partners (1.3% and 5.0% respectively). Risky behaviors among the participant’s partners appeared to be prevalent, with a large proportion of participants reporting a positive or suspected history of their partners having sex with CSWs (40.0%) and IDUs (18.8%). History of IPV by a current or recent partner was widespread among participants (see Table 4) with more than half of the participants reporting at least one form of abuse by their current or most recent partner (51.3%) and almost a third reporting physical and/or sexual abuse (30.0%). Many participants experienced more than one type of abuse by an intimate partner (27.5%).

**Differences between high risk and low risk groups**

There were no differences in mean age, years living in the U.S., years of education, individual income and acculturation among participants reporting inconsistent condom use during vaginal sex when compared to participants who reported consistent
use. There were also no differences in demographic variables and acculturation among participants who reported IPV when compared to those who did not. However, women who reported being frequently under the influence of alcohol or drugs during sexual intercourse had a higher mean in years of education ($M = 15.91, SD = 3.28$) than women who reported infrequent or no use ($M = 13.60, SD = 3.94$), $t[78] = -2.65, p = .011$. They also scored higher on the non-Hispanic acculturation subscale of the BAS ($M = 29.95, SD = 6.90$ vs. $M = 25.05, SD = 6.44$, $t[28] = 2.20, p = .031$) and lower on the Hispanic acculturation subscale ($M = 41.45, SD = 3.28$ vs. $M = 43.40$, $t[78] = -2.98, p = .004$ (see Table 5).

Substance Abuse and HIV Risks

Substance abuse was significantly related to some participant and partner HIV risks. While the participants’ frequency of being under the influence of alcohol or drugs during sexual intercourse was not related to their use of condoms during vaginal sex ($FET, p = .315$), there appeared to be a trend towards significance when examining the relationship between the participant’s substance abuse practices during sex and her history of STIs, $\chi^2(1, N = 80) = 3.59, p = .058$. There was also a significant relationship between the participant’s substance abuse and her partner’s history of having sex with IDUs, $\chi^2(1, N = 80) = 6.18, p = .013$. In fact, participants who reported frequently being under the influence of alcohol or drugs during sexual intercourse were over four times at greater odds of having a partner who had a positive or suspected history of having sex with an IDU than participants who reported infrequent or no use ($OR = 4.16, 95\%CI = 1.29, 13.47$). However, they were not more likely to report having a partner who had a
positive or suspected history of STIs, IDU, having sex with other men or having sex
CSWs (see Table 6 or Table 9).

Participants who reported frequently being under the influence of alcohol or drugs
during sex were over 8 times at greater odds of also reporting a partner that frequently
abused alcohol or drugs during sex \((OR = 8.40, 95\%CI = 2.79, 25.34), \chi^2(1, N = 80) = 8.40, p < .0001\). In turn, their partner’s substance abuse was significantly associated with
their partner having a positive or suspected history of having sex with CSW, \(\chi^2(1, N = 80) = 4.80, p = .028\). Participants who reported having a partner who was frequently
under the influence of alcohol or drugs during sexual intercourse were almost three times
at greater odds of reporting a partner with a positive or suspected history of having sex
with a CSW \((OR = 2.96, 95\%CI = 1.10, 7.93)\). The partner’s substance abuse was not
related to any of the participant’s HIV risks (i.e., condom use, history of STI) or any
other of the partner’s risk (i.e., history of STI, IDU, sex with men or sex with CSW) (see
Table 7 or Table 9).

**IPV and HIV Risks**

While consistent condom use was independent of IPV \((FET, p = 1.00)\),
participants who reported being a victim of sexual and/or psychological abuse were over
6 times at greater odds of reporting a history of STIs \((OR = 6.50, 95\%CI = 1.73, 24.44),
FET, p = .005\). IPV was also associated with their partner’s HIV sexual risk behaviors.
Participants with a history of IPV were more likely to report having a partner with a
positive or suspected history of having sex with men (20.8% among victims of IPV vs.
0.0% among non-victims) \((FET, p = .002)\). They were also almost 3 times at greater odds
of reporting a partner with a positive/suspected history of having sex with CSWs \([OR =
2.96, 95%CI = 1.10, 7.93, $\chi^2(1, N = 80) = 4.80, p = .028$] and at 5 times greater odds of reporting a partner with a positive/suspected history of having sex with an IDU ($OR = 5.00, 95\%CI = 1.53, 16.32), \chi^2(1, N = 80) = 7.91, p = .005$. IPV was not associated with having a partner with a history of STIs or IDU (see Table 8 or 9).

Substance Abuse and IPV

While the participant’s substance abuse during sexual intercourse was independent from their histories of IPV ($\chi^2[1, N = 80] = 1.720, p = .190$), there was a significant relationship found between having a partner that was frequently under the influence of alcohol and/or drugs during sexual intercourse and being a victim of sexual and/or physical abuse, $\chi^2(1, N = 80) = 6.53, p = .011$. Participants who reported having a history of physical and/or sexual abuse were almost four times at greater odds of reporting a partner that was frequently high or drunk during sexual intercourse than participants who did not report a history of IPV ($OR = 3.67, 95\%CI = 1.31, 10.21$).

Discussion

The findings from this study suggest that HIV risks, substance abuse and IPV may be closely related to one another in multiple ways. While neither the participant’s nor her partner’s substance abuse during sexual intercourse was directly related to the participant’s condom use or history of STIs (although trends were noted), substance abuse may indirectly have an impact on the participant’s risk for HIV because of it’s close association with HIV related risk behaviors. Participants who reported frequently being under the influence of alcohol or drugs during sexual intercourse were more likely to have a partner who also abused alcohol or drugs. Substance abuse, in turn, was related to the partner’s risky sexual habits such as having sex with a CSW or IDU.
Consequently, participants were placed at risk for HIV not only because of their own substance abuse practices, but also from associating with men with problematic behaviors. The participant’s substance abuse practices during sexual intercourse were not related to her history of IPV. However, her partner’s substance abuse behaviors were. Although IPV was not related to consistent condom use, it was associated with the participants risk for HIV (i.e., history of STI) and her partner’s sexual risk behaviors, such as the participant’s history of STIs, and having a partner with a positive or suspected history of having sex with men, CSWs and IDUs. Raj and associates (2004) also noted that while condom use was not related to abuse, various partner HIV related risk behaviors such as infidelity were. Taken together, these results suggest that participant’s risk relating to the conditions under study may be more influenced by her partner’s behaviors than her own. This hypothesis has been well supported by others in the published literature (Hader et al., 2001; Raj, Silverman & Amaro, 2004).

The results from the qualitative component of Project DYVA can help us hypothesize about underlying cultural factors that shape the relationship between HIV risks, substance abuse and IPV among this population. One of the major issues that emerged from the content analysis of the focus groups collected in the first phase of the study was the role that *machismo* and culturally rooted gender-inequalities played in propagating risky behaviors such as substance abuse, infidelity and aggression among men and the lack of control over sexual/reproductive decision making among women (see Chapter 2). In fact, participants believed that these inequities were so intrinsic in their culture, that women themselves propagated these gender norms by raising their male and female children with different privileges and responsibilities. Other qualitative studies
exploring HIV, substance abuse and/or IPV among this population have also documented the role that culturally ascribed ideals for men and women play in increasing Hispanic women’s risks for HIV and IPV (e.g., Klevens et al., 2007; Moreno, 2007). These findings are in line with the Theory of Gender and Power (Connell, 1987; Wingwood & DiClemente, 2000) that argues that society promotes gender-based inequities in intimate heterosexual relationships that place women at risk for IPV and reduce a women’s control over sexual decision making. More research is needed to obtain a greater understanding of cultural factors that influence these conditions.

When interpreting the results of this study it is also important to note that while there were no differences in the demographic characteristics and acculturation status of participants who reported inconsistent condom use and IPV, there were differences in women reporting frequent substance abuse during sexual intercourse. Individuals reporting being frequently under the influence of alcohol or drugs during sexual intercourse had a higher mean education and were more acculturated to the U.S. culture than individuals who reported infrequent or no use. Other researchers who have studied substance abuse among Hispanics have noted that while higher education is a strong protective factor for HIV and IPV among Hispanic women it is a risk factor for substance abuse (Newcomb & Carmona, 2004). It has also been well documented that being more highly acculturated to the U.S. culture is a major risk factor for substance abuse (Caetano, Ramisety-Mikler & McGrath, 2005; Lara, Gamboa, Kahramanian, Morales & Bautista, 2005). The relationship between acculturation and risk behaviors were also supported by the qualitative findings of this study. In fact, one of the main themes that emerged from the focus groups (i.e., “uprooted in another world”), described how the adoption of the
more “liberal” values of U.S. culture and the impact this had on their families made their community more vulnerable to HIV, substance abuse and IPV (see Chapter 2). It may be that as Hispanic women acculturate to the U.S. culture, they begin to adopt more problematic behaviors without having the tools that are necessary reduce risks (e.g., abstaining from sex while under the influence of alcohol or drugs). More research is needed to learn about what happens during the acculturation process that may place Hispanics at risk for substance abuse and related conditions and why the direction of the relationship between acculturation and risk may vary depending on the behavior being considered.

Despite the fact that this study did not aim to identify the prevalence of risk behaviors, one can not overlook the alarmingly high rates of inconsistent condom use (93.8%) and physical and/or sexual abuse (30.0%). Although these are much higher than those reported in population based studies (e.g., Tjaden & Theonnes, 2000), they are comparable to what has been documented with other high risk, community-based samples of Hispanics (Hazen & Soriano, 2007; Raj et al., 2004; Raj et al., 2006). One of the reasons that these rates may have been so high was because the research team advertised Project DYVA as study that explored substance abuse, violence and risky behaviors among Hispanic women. It is likely that women who had experiences with some of these issues were attracted to the study, especially given the lack of access to trusted health care and social services within this community. Additionally, participants were mostly recruited from a CBO that was well trusted within the community and used bilingual, bicultural, female interviewers that were trained in establishing rapport with participants. It is also possible that because of this trust, that the high rates of risky behaviors and IPV
is more accurate than the lower rates that have been reported in other studies. In either case, these rates underscore the immense risk of Hispanic women for STI’s and IPV.

There are additional methodological limitations that must be considered when interpreting the results of this study. The data collected in this study was entirely self-reported and therefore subject to a wide range of biases. It is likely that participants that experienced IPV may be more likely to recall events and situations (e.g., partner’s substance abuse) surrounding abuse (recall bias). Additionally, because such sensitive topics were discussed, participants may have not felt comfortable accurately describing their experiences with their partners. However, because the DYVA research team utilized female, bicultural and bilingual interviewers that were trained in helping the participants feel safe and comfortable and conducted interviews in a respected community organization, the investigators of this study feel confident that trust was established.

Second, the study utilized a cross-sectional design in where information about history of HIV risk, substance abuse and IPV were collected simultaneously. Consequently, the directions of the relationships cannot be ascertained. For example, one can not say that substance abuse or IPV was a risk factor for HIV among participant. Third, because positive and suspected responses to partner behaviors were combined into one category and compared to negative reports, it is unknown what is associated with risks for IPV, the actual behavior or suspecting it (or both). Lastly, the reported findings were obtained from a small pilot project that utilized a convenience sample of Hispanic women from South Florida. Given that Hispanics comprise a heterogeneous group with varying countries of origin, socioeconomic backgrounds and level of acculturation, caution must
be taken when generalizing the results of this study to other groups of Hispanics and women.

Implications for Research & Practice

The findings from this study have various implications for research and practice. The high rates of exposure to HIV related risk factors, substance abuse and IPV among participants underscores the importance of targeting these health conditions among Hispanics. Despite the fact that a strong relationship between these three conditions were established in this study and in previous studies, there are currently no prevention programs reported in the literature that address HIV, substance abuse and IPV within one framework (Geilen et al., 2007). When developing culturally specific interventions aiming to prevent these conditions among Hispanic women, it appears to be especially important to target their male partners. In fact, as suggested by this study, targeting the partner’s substance abuse and risky sexual behaviors through treatment and prevention may be more important in addressing HIV and IPV among Hispanic women than specifically targeting their individual behaviors (e.g., women’s substance abuse and condom use). Given the lack of differences in demographic characteristics and acculturation levels of women who reported HIV risks and IPV, interventions need to be developed to target Hispanics across different age groups, socioeconomic conditions and levels of acculturation. Additional, more “Americanized” strategies must be incorporated in these interventions to target the prevention and/or treatment of substance abuse among the more highly acculturated subgroups within this population.

More research needs to be conducted to identify risk and protective factors that cut across HIV risks, substance abuse and IPV among Hispanics. This is fundamental in
increasing our understanding of how these issues are related and identifying strategies that are needed to effectively target these conditions within one framework. One of the risk factors that appears to cut across these conditions among Hispanics are culturally rooted gender inequities. Therefore, it essential that interventions targeting this population include strategies aimed at addressing the aspects of machismo and marianismo and other cultural factors that may promote imbalances in power and control within intimate relationships (Amaro, Vega & Valencia, 2001). Activities that promote the more positive aspects of machismo, such as “protecting” and “providing” for the family, and marianismo, such as the “power” to produce life, can be used when designing prevention strategies for HIV and IPV among this population (Carillo & Tello, 1998; Cauce & Domenech-Rodriguez, 2002). Interventions also need to develop skills among women that empower them to play a greater role in sexual decision making (e.g., greater knowledge about risk factors for HIV, communication and condom negotiation skills) and promote healthy relationships among intimate partners (e.g., compromise, shared decision making, honesty, respect) (National Center on Domestic and Sexual Violence, 2008).
CHAPTER 4: INTIMATE PARTNER VIOLENCE, DEPRESSION AND RESOURCE AVAILABILITY AMONG A COMMUNITY SAMPLE OF HISPANIC WOMEN

Background

Intimate Partner Violence (IPV) is a widespread public health problem that has been associated with a multitude of negative mental health consequences (Golding, 1999; Campbell, 2002). Although IPV cuts across socio-demographic class, race/ethnicity, gender and cultures, certain communities appear to be disproportionately affected by this problem. Hispanic women in the U.S. appear to be one of the groups most greatly impacted by IPV and its associated mental health consequences. Although some studies have reported that the higher rates of IPV noted among Hispanics disappear when socioeconomic factors are controlled for (Tjaden & Theonnes, 2000; Kantor, Jasinki & Aldarondo, 1994), a recent study found that Hispanic couples experience a higher incidence of IPV than Whites even when socioeconomic status is considered (Caetano et al., 2005). Further, studies that have explored the consequences of IPV have documented that Hispanic female victims of IPV have higher rates of depression than both White and Black female victims (Caetano & Cunradi, 2003). This is especially concerning, considering that this group experiences other economic and resource disparities such as low income and lack of access to health care (U.S. Census Bureau, 2008) that may play a role in not only increasing their risk for IPV but also making this group more vulnerable to depression and other mental health consequences.

In order to increase our understanding of what makes Hispanics females vulnerable to poor mental health outcomes, it is important to explore the relationship
between IPV, depression and access to resources among this population. The Vulnerable Populations Conceptual Model (Flakerud & Winslow, 1998), a model that describes why certain groups are more vulnerable to negative health outcomes than others, may be useful in understanding vulnerabilities among Hispanic females. According to this model, risk factors (e.g., obesity, smoking), the health status of a community (e.g., the incidence of heart disease) and resource availability (e.g., income, access to health care) are all related. In this study, the Vulnerable Populations Conceptual Model (Flakerud & Winslow, 1998) will be used to conceptualize the relationship between exposure to IPV, depressive symptoms and resource availability among Hispanic women and to test hypothesized relationships between these. In doing so, data from Project DYVA (Drugs and Violence in the Americas), a qualitative and quantitative pilot research study that explored the experiences of Hispanic women in the South Florida community with regard to substance abuse, violence and risky sexual behaviors, will be used to test the applied model.

Review of the Literature

IPV among Hispanics

The term Intimate Partner Violence (IPV), is a general term used to describe physical, sexual and/or psychological abuse or harm committed by a current or former spouse or boyfriend/girlfriend (Centers for Disease Control & Prevention [CDC], 2007). Studies comparing the incidence and prevalence of IPV among Hispanics have been inconsistent in regard to whether they have found higher rates among Hispanics when compared to other racial/ethnic groups. While some population-based studies have found no differences in the rates of IPV among Hispanics when socioeconomic variables are
controlled for (Tjaden & Theones, 2000; Kantor, Jasinki & Aldarondo, 1994), other studies have noted disparities (Caetano, Field, Ramisetty-Mikler & McGrath, 2005). In the most recent of these population-based studies, the incidence and reoccurrence of IPV (i.e., reporting IPV both in 1995 and 2002) was estimated among a nationally representative sample of cohabitating couples that were followed over time. These investigators noted that both the incidence and reoccurrence of IPV was higher among Hispanics (14% and 58% respectively) than among Whites (6 % and 37% respectively) (Caetano et al., 2005). Further, research conducted with specific high risk Hispanic communities have documented even higher rates of IPV, with up to 20.9% of the Hispanic women reporting sexual coercion and 33.9% reporting physical violence throughout their lifetimes (Hazen & Soriano, 2007).

*Depression among Victims of IPV*

Depression, the leading cause of disability in the world (The World Health Organization, 2008), is one of the most prevalent consequences of IPV among women (Campbell, 2002). In a meta-analysis including 18 studies examining IPV as a risk factor for mental disorders, it was reported that the mean prevalence of depression among victims of IPV, which was weighted by the inverse of its variance in order to give more influence to results with greater precision, was 47.6% (Golding, 1999). Depression appears to impact Hispanic female victims of IPV to a greater extent than women from other racial and ethnic groups. In a study exploring the relationship between IPV and depression among a probability sample of White, Black and Hispanic households, the prevalence of depression among women reporting IPV was greater for Hispanics (38%) than both Blacks (30%) and Whites (20%) (Caetano & Cunradi, 2003). This is significant
considering that Hispanics in the general U.S. population appear to have a lower prevalence of depression and other mental health disorders when compared to Whites (Breslau et al., 2006), although in the past it has been documented that Hispanics have higher rates (Kessler et al., 1994). Differences in these findings may be partly due to variations in the resources the Hispanic samples included in these studies had access to and other socio-ecological factors that may have varied at the time data was collected.

Resource Availability

Socioeconomic. Vulnerabilities relating to IPV and its associated consequences among Hispanic women can be better understood by also considering the socioeconomic resources they have access to. Socioeconomic inequalities have been identified as risk factors for IPV in both the general population (Tjaden & Theonnes, 2000) and among Hispanics (Kantor et al., 1994; Cunradi, Caetano & Schafer, 2002). Hispanics in the U.S., have a lower mean educational attainment, median household income and individual income than the general population, even though a greater proportion of Hispanics are in the labor force (U.S. Census Bureau, 2008). However there is little consensus on the specific resource disadvantages that place Hispanic women at an increase risk for IPV and whether these persist when other factors are also considered.

Researchers that have compared socioeconomic predictors of IPV between different racial and ethnic groups have noted that the relationships between socioeconomic factors and IPV differ according to race/ethnicity (Cunradi et al., 2002; Cunradi, Caetano, Clark & Schafer, 2000). For example, in a study exploring socioeconomic predictors of IPV among White, Black and Hispanic couples in the U.S., male unemployment, a well established risk factor for IPV in the general population
(CDC, 2007), was a significant predictor for IPV among Black couples but not among Hispanic or White couples (Cunradi et al., 2002). Conversely, in an earlier study conducted by the same research group, male unemployment was predictive of IPV among Hispanic couples, but not among White or Black couples (Cunradi et al., 2000).

Identified socioeconomic risk factors for IPV among Hispanics have varied from study to study depending on the socioeconomic indicators (e.g., employment vs. income) and control measures (e.g., relationship conflict) that were included in the analyses. While low income has consistently been identified as a socioeconomic risk factor for IPV among Hispanics (Cunradi et al., 2002; Caetano et al, 2000; Kantor et al., 1994), there have been inconsistent findings relating to whether education is associated with IPV. While some researchers have reported that education is not related to IPV among Hispanics (Cunradi et al., 2002), others have found strong relationships (Denham et al., 2007; Newcomb & Vargas Carmona, 2004). In a study examining the socioeconomic predictors of IPV among a representative sample of couples from different Hispanic subgroups (e.g., Mexican, Puerto Rican and Cuban) and racial origins, male unemployment was a significant predictor of male to female IPV across all groups (Kantor et al., 1994). However, in a further examination of this same dataset, Aldarondo and colleagues (2001) found that the unique contribution of socioeconomic resources (i.e., income, employment and occupational status) to predict IPV is significantly reduced when relationship factors and other differences between Hispanic subgroups are considered. This indicates that there may be other factors (e.g., relationship conflict or stress) that mediate the relationship between economic resources and IPV.
Environmental Resources. The lack of environmental resources relating to access to health care may play a role in the relationship between depression and IPV. It has been documented that Hispanic female victims of IPV are less likely to seek health services than Black and White women (Lipsky, Caetano, Field & Larkin, 2006) and over four times more likely to report an unmet need for mental health care than non-abused women from their same ethnic group (Lipsky & Caetano, 2007). There are many reasons why Hispanic females, whether they are victims of IPV or not, may not access health care services (e.g., lack of English proficiency, fear of deportation, lack of knowledge relating to services). One of the barriers to accessing health care services is lack of insurance. In fact, Hispanics have the highest uninsured rate (32.7%) among all major racial/ethnic groups (U.S. Census Bureau, 2005). The inability to access physical and mental health services interferes with opportunities for preventing, screening and addressing IPV among this population, thus making Hispanics more vulnerable to poorer mental health outcomes.

Self-esteem. Self-esteem may be an important resource that may protect women from IPV and depression. In a study utilizing the Vulnerable Populations Conceptual Model (Flaskerud & Winslow, 1998) to examine factors associated with depression among Mexican women, the authors found that intrinsic factors such as having a strong sense of mastery, life satisfaction and resilience accounted for more of the variance in depression scores than extrinsic resource variables such as adequacy of financial resources (Heilemann, Lee & Kury, 2002). Although, self-esteem was not specifically included in this study, self-esteem, the favorable or unfavorable attitude towards self (Rosenberg, 1965), can be conceptualized as an intrinsic “resource.” In the qualitative
phase of Project DYVA, participants perceived self-esteem as playing an important role in IPV and described this concept as not only a risk factor for, but a consequence of IPV (see Chapter 2). Other quantitative studies have also supported the associations between self-esteem, IPV and mental health outcomes (Bradley, Schwartz & Kaslow, 2005; Zlotnick, Johnson & Kohn, 2006).

Gaps in the Literature

Although a great deal has been learned about the relationship between IPV and depression in the general population, few studies have included a significant number of Hispanics in their samples and reported their results according to race and ethnicity. For example in Golding’s meta-analysis (1999), which is often referenced when describing the impact that IPV has on victims, only 4.1% of the participants of all the combined studies were Hispanic. Therefore, it is uncertain if these results are applicable to Hispanic women. Further, studies that have specifically targeted Hispanics have largely focused on the Mexican-American population (Hazen & Soriano, 2007; Heilemann et al., 2002; Lown & Vega, 2001). The results from these studies may not be generalizable to other groups of Hispanics in the U.S. with different countries of origin, acculturation levels and other sociodemographic characteristics. Research in this area has also mostly relied on clinical samples of women or women that have access to health care (Bonomi et al., 2006; Bauer, Rodriguez & Perez-Stable, 2000; Cooker et al., 2002) and/or have required women to be able to speak and write in English (Bonomi et al., 2006; Breselau et al., 2006; Koopman, Ismailji, & Palesh, 2007). The results of these studies may not apply to Hispanic women in the community that may have limited access to health services and lack proficiency in the English language. Although researchers have found that
availability of certain resources are related to risks for IPV (e.g., Bonomi et al., 2006; Kantor et al., 1994; Tjaden & Theonnes, 2000) and depression separately (e.g., Heilemann et al., 2002), the relationships between all three of these variables among Hispanic females have not been examined within one conceptual framework.

The Vulnerable Population Conceptual Model

According to Flaskerud and Winslow’s Vulnerable Populations Conceptual Model (1998), health status, relative risk and resource availability, the three major concepts of their model, are all related. The health status of a community is defined as the morbidity and mortality of a specific disease. Examples of these may include the incidence of heart disease, cancer mortality or, as in the case of this study, depressive symptoms. Relative risk is the likelihood of exposure to particular risk factors. More specifically, it is defined as the ratio of poor health among those exposed to risk factors and do not have access to resources compared to those who are not exposed and do have access to resources (Adday, 1994). Keeping in line with the previous examples provided for health status, risk factors may include obesity, smoking and exposure to IPV. Lastly, resource availability is the access to both socioeconomic and environmental resources. While socioeconomic resources include human capital (e.g., income, education, housing), social connectedness or integration (e.g., family support) and social status, environmental resources include health care quality (e.g., culturally competent health services) and access to health care (e.g., health insurance). In this study the relationship between histories of IPV, depressive symptoms and various resources (i.e., income, education, employment status, access to health insurance and self-esteem) were conceptualized according to the Vulnerable Populations Model (see Figure 5).
The Vulnerable Populations Conceptual Model (Flaskerud & Winslow, 1998) describes three main relationships between health status, relative risk and resource availability. The first of these relationships is that the lack of access to socioeconomic and environmental resources (i.e., resource availability) increases the relative risk of a group or the inability of an individual to avoid exposure to risk factors. In the model for this study, resource availability, which is operationalized as income, education, employment, health insurance status and self-esteem, the major resource indicators collected in Project DYVA, increases the participants’ exposure to IPV (relationship # 1). IPV was defined as being a victim of physical or sexual abuse that was perpetrated by a current or most recent partner. Psychological abuse was not included in this study’s definition of IPV because the questions related to this form of abuse in the questionnaires administered in Project DYVA were less specific than the other forms of abuse. This definition was also limited to physical and/or sexual abuse in order to be consistent with how IPV has been defined in similar studies (e.g., Lown & Vega, 2001; Newcomb & Vargas Carmona, 2004). The second relationship depicted in the model is between relative risk and health status. The relationship between these two constructs is bidirectional. While exposure to risk factors leads to increased morbidity and mortality, morbidity and mortality may also impact exposure to risk factors. In this model, exposure to IPV increases depressive symptoms. In turn, increased depressive symptoms also increase the likelihood that individuals be exposed to IPV (relationship # 2). Lastly, a relationship is drawn between health status and resource availability. According to the model, increased morbidity and mortality within a community impacts resource availability by further depleting access to resources. In this study, higher depressive
scores impacts access to resources by decreasing their potential to work and earn money, furthering their education, obtaining health insurance and lowering their self-esteem (relationship # 3).

Aims & Hypotheses

The main purpose of this study was to describe the relationship between IPV, depression and resource availability among Hispanic women by applying the Vulnerable Populations Conceptual Framework to the data collected in Project DYVA. In doing so, the three relationships depicted in the conceptual model (see Figure 5) will be explored through testing the following four hypotheses:

1) Income, education, employment, health insurance status and self-esteem (i.e., resource availability) predict exposure to IPV.
2) Exposure to IPV predicts depression scores, even when considering other potential risk factors (i.e., age and child abuse).
3) Depression scores predict exposure to IPV, even when identified important resource availability variables are controlled for.
4) Depression scores predict income, education, employment, health insurance and self-esteem (i.e., resource availability).

Methodology

Design

The data used for this study was collected during Project DYVA (N=82). The aim of Project DYVA was to explore the experiences of Hispanic women with regard to substance abuse, violence and risky sexual behaviors through the use of both qualitative (phase I) and quantitative research methods (phase II). The data used for this study was
taken entirely from the second, quantitative phase of the Project DYVA that was completed between June and October of 2006.

Sample & Procedures

In order to be eligible to participate in the study, candidates had to self-identify as being Hispanic or Latino, female and between the ages of 18 and 60. The majority of participants were recruited into the study from a trusted community-based organization in South Florida that provides a wide-range of services to Hispanics and other immigrants (e.g., English classes, career counseling, and parenting courses). Additional participants were recruited through a local newspaper article about the project and through snowball sampling methods (Miles & Huberman, 1994) in where participants were encouraged to inform their family and friends about the study. Although the majority of the Hispanic women who participated in this first phase of the study also participated in the second phase, additional individuals were recruited into the second phase.

Approval from the University’s Internal Review Board (IRB) was obtained prior to conducting any participant activities. Signed informed consent was obtained from all study candidates prior to their participation in the study. In the first phase, eight focus groups were conducted with a total of 81 Hispanic women. In the second phase of the study, structured questionnaires were administered to 82 participants in a face-to-face interview format in English or Spanish, depending on the participant’s preference. A face-to-face interview format was used in order to allow women who were illiterate to participate in the study. All study staff consenting participants, facilitating the focus groups and administering the questionnaires were female, bilingual and bicultural.
Participants were paid 50 dollars in cash upon the completion of the interview to compensate them for their time, travel and child care arrangements.

**Characteristics of current sample**

*Demographic and resource availability.* Data collected during the second, quantitative phase of Project DYVA were used for this current study (N = 82). Participants were diverse in respect to their age, country of origin, socioeconomic situations and other socio-demographic variables (see Tables 2 and 3). The average age of the participants was 39.28 (SD = 10.91). They represented 12 different countries, with the greatest proportion being born in Colombia (47.6%), Venezuela (13.4%) and Ecuador (8.5%), and had spent an average of 9.31 years in the U.S. (SD = 8.26). Only two women (2.4%) participating in the study were born in the U.S. The majority of participants were married (54%) and/or currently living with a partner (64.6%), and had an average of less than two children (M = 1.68, SD = 1.23). Two participants (2.4%) reported never having an intimate partner and were therefore not included in the analysis of this study. The majority of participants were currently not employed (59.8%) and had a low monthly income (M = $493.05, SD = 791.80). Although the household income was higher (M = $2,766.35, SD = 3943.07), there was an average of 3.49 (SD = 1.19) participants per household who lived off of this income. Despite their low employment rate and mean income, they had a relatively high level of education, with a mean of 14.28 years of education (SD = 3.87). Only approximately one third of participants had health insurance (35.4%). When asked how they paid for their health care, 27.8% of the sample reported that their private or public insurance paid for the costs. The remainder of the participants paid completely out of pocket (30.5%) or through some other form (23.3%). A large
proportion of participants had never accessed health care in the U.S. (23.3%). The mean score for self-esteem was relatively high, with a mean score of almost 35 points ($M = 34.76$, $SD = 4.60$) on a scale from 10 to 40.

**IPV and depression.** IPV and depression were widespread among participants. Over 30% of participants reported being a victim of physical and/or sexual abuse. If psychological abuse is also considered of IPV, 51.3% participants reported at least one form of abuse by their current or most recent partner. Psychological abuse was the most common form of IPV (48.6%), followed by physical (28.8%) and sexual (12.5%) abuse. However, many participants experienced a combination of these forms of IPV with 27.5% reporting two or more types of abuse. The mean depression score among participants was just under the clinical cut-off point of 16 ($M = 15.14$, $SD = 12.37$), categorizing 40.2% of the sample as depressed.

**Measures**

The measures used for this study were selected from the larger battery of measures that were administered in Project DYVA in a face-to-face structured interview format. This battery of measures was based on the work of Peragallo and colleagues (2005) who originally developed the interview to evaluate the efficacy of a HIV risk reduction intervention that also addressed IPV among Hispanic women. The original set of questionnaires were adapted to better meet the needs of Project DYV by eliminating some of the questions relating to HIV and adding more questions relating to violence and substance abuse (Peragallo, Gonzalez & Vasquez, 2007).
Risk Factor

The Partner Table. The partner table was originally developed by Peragallo and colleagues (2005) and adapted by the investigators of Project DYVA (Peragallo et al., 2007). This table collected detailed information regarding the past five intimate relationships participants had. The participants were asked to recall their last five sexual partners, starting with their current or most recent partner and working backwards. Thirty-four questions were asked for each of their past 5 intimate relationships. These questions related to the partner’s gender, participant’s and partner’s age when the relationship began, the duration of the relationship, the partner’s ethnic background, sexual practices (i.e., vaginal, oral and anal sex and condom use), partner’s alcohol and illicit drug use during the relationship, partner’s screening behaviors for sexually transmitted infections (STIs) and HIV risk behaviors (i.e., sex with commercial sex workers, other men and intravenous drug users), physical, sexual and psychological abuse (IPV), and the participants help-seeking behaviors during this relationship. The screening questions for physical (did your partner hit or hurt you in any way?) and sexual (were you ever forced to have sex with this partner?) abuse were the only variables within the Partner Table that were used for this study.

The Violence Assessment. The violence assessment was also originally developed by Peragallo and colleagues (2005) and adapted by the investigators of Project DYVA (Peragallo et al., 2007). This assessment included 9 major questions (with various specifying questions for positive responses) relating to community violence and abuse during childhood and adulthood. They were asked if they were ever physically (were you ever physically abused?), sexually (were you rape or sexually abused?) and/or
psychologically abused (were you verbally or emotionally abuse?) as a child or adult. These questions allowed participants to self-categorize themselves as being victims of sexual, physical and psychological abuse and allowed participants to describe the abuse in their own words. Probes with examples of types of abuse were given to participants when asked about their histories. For example, after being asked if they had been verbally or emotionally abused, they were asked if they were yelled at, called names, threatened, stalked or treated in a possessive manner. For any positive responses to these questions, detailed information about the participant’s and perpetrator’s age when the abuse started and finished, the perpetrator’s relationship to the participant (e.g., partner, uncle, coworker), their gender and ethnicity, and a description of the abuse was collected. Only the questions relating to physical and sexual abuse during childhood and adulthood were used for this study.

Exposure to IPV, the risk factor for this study, was ascertained from the Partner Table and the Violence Assessment. Any positive responses to questions relating to sexual or physical abuse by their current or most recent partner was used to generate the exposure to IPV category (1 = exposure to physical and/or sexual abuse, 0 = no exposure). Because both the Partner Table and the Violence Assessment utilized screening questions relating to multiple domains including substance abuse, violence/abuse and risky sexual behaviors, internal consistency could not be measured. However, there was a high level of agreement between the participants’ responses to the two questions relating to sexual (98.7%) and physical (96.3%) abuse by their current or most recent partner that were obtained from each of these measures.
Health Outcome

Center for Epidemiologic Studies Scale (CES-D). Depressive symptoms, the health outcome included in the conceptual model, were obtained from responses to the CES-D scale (Radloff, 1977) and measured as a continuous variable. The CES-D scale consists of 20 items that were developed to measure the frequency of depressive symptoms in the general population. Responses to these items are coded according to the frequency the respondent experiences certain symptoms during the past week using a Likert scale (0 = rarely or none of the time [less than one day out of the week] to 4 = almost all of the time, [5-7 days]). These responses are added for a total score that can range from 0 to 40 points. Scores of 16 and above indicates a likelihood of clinical depression. This scale is widely used in clinical and population-based samples and has been translated and validated in Spanish (Roberts, 1980). In this sample, the CES-D demonstrated good internal consistency (Cronbach’s α = .91).

Resource Availability

Demographic Section. The demographic component of the questionnaire was administered at the beginning of the interview. Participants were asked to report their age, the number of years that they had lived in the U.S., their country of origin, civil status, whether they were currently living with a partner, the number of children that they had, the number of children that lived with them, their religion and religiosity, individual and household income, education, employment status, and health insurance status. Individual income, education, employment, and insurance status, were the only components of the demographic section that were used in defining resource availability in this study. These were selected because they were closely aligned with the
operationalization of human capital and environmental resources that were described Vulnerable Populations Conceptual Model (Flaskerud & Winslow, 1998).

*The Rosenberg Self-Esteem Scale (Rosenberg, 1989).* The Rosenberg Self-esteem Scale (RSE) was used to assess self-esteem among study participants on a continuous scale. This measure consists of 10 questions relating to the participants’ perceptions of themselves. Responses to these questions range from 1 (strongly agree) to 4 (strongly disagree). The higher the score, the higher the respondent’s self esteem. Total scores range from 10 (low self-esteem) to 40 (high self-esteem). This scale is perhaps the most widely used scale for self-esteem and has been demonstrated to show good reliability when used among Hispanics (Robins, Hendin, & Trzesniewski, 2001). In this study, the self-esteem scale demonstrated good internal consistency (Cronbach’s \( \alpha = .84 \)).

**Analysis**

Various statistical analyses were conducted to test the four conceptually driven research hypotheses. In order to test the first hypothesis, multiple logistic regression was conducted using exposure to IPV within the participant’s current or most recent intimate relationship (1 = reported sexual and/or physical abuse, 0 = not exposed) as the outcome and income, education, employment status (1 = yes, 0 = no), health insurance status (1 = yes, 0 = no) and self-esteem as the predictors. Because the sample size was limited and there was not enough power to permit the inclusion of all the resource availability predictors in the logistic regression model simultaneously (Peng, Lee & Ingersoll, 2002; Tabachnick & Fidell, 2001, p. 123), backward step-wise methods were used. In this method all potentially important independent variables are included in the beginning. Unimportant predictors are removed one at a time until those remaining in the model
contribute significantly to the prediction of the outcome, in this case IPV (Altman, 1999, p. 344). In order to test the second hypothesis multiple linear regressions was used. Exposure to IPV was used as the predictor and depression scores were used as the outcome. Age and exposure to childhood abuse (1 = yes, 0 = no) were also included as independent variables because they may be additional risk factors for depression. Again, backwards stepwise methods were used. In order to test the third hypothesis, simple logistic regressions was employed using depression scores as the predictor and exposure to IPV as the outcome. In addition to depression scores, resource variables identified as being predictors of IPV (i.e., results of testing hypothesis #1) were entered into the multiple logistic regression model in order to control for their effects. Lastly, a series of simple linear regressions were generated to test the fourth hypothesis using depression scores as the predictor variable. While linear regressions were used for continuous outcomes (income, education and self-esteem), logistic regression was used for dichotomous outcomes (employment status and health insurance). All analyses were conducted on SPSS, version 15.0.

Results

Hypothesis 1- Resource Availability and Exposure to IPV

The only resources that were significant predictors of IPV were individual income ($Wald \chi^2 = 6.68, p = .010$) and self-esteem ($Wald \chi^2 = 3.34, p = .013$). In the final model that was generated through the backward step-wise logistic regression, participants that had a greater individual income were at slighter greater odds of reporting IPV ($AOR = 1.00, 95\% CI = 1.000, 1.002$). On the other hand, participants with a higher self-esteem
had lower odds of reporting exposure to IPV (AOR = 0.86, 95%CI = 0.77, 0.97).

Education, employment and health insurance status did not predict IPV (see Table 10).

Hypothesis 2 - Exposure to IPV and Depression Scores

Although age was a significant predictor of depression scores and included in the final model that was generated through backward stepwise linear regression methods ($b = -0.38, SE = 0.12, t[77] = -3.06, p = .003$), exposure to childhood physical or sexual abuse was not (see Table 11). In the final model, reporting a history of IPV by a current or recent partner predicted depression scores even when the age of the participants was controlled for ($R^2 = .15, F[2,77] = 6.99, p = .002$). Participants who reported being exposed to IPV had significantly higher depression scores than participants who did not ($b = 5.88, SE = 2.85, t[77] = 2.06, p = .042$).

Hypothesis 3 - Depression Scores and IPV

When conducting a simple logistic regression, depression scores was significantly related to IPV ($Wald \chi^2 = 3.87, p = .049$). Participants with higher depression scores were at greater odds of reporting IPV ($OR = 1.04, 95\%CI= 1.00, 1.08$). However, when income and self-esteem were controlled for, depressive symptoms did not predict IPV, although a trend was noted ($b = .043, SE = .02, Wald \chi^2 = 3.68, p = .055$) (see Table 12).

Hypothesis 4 - Depression Scores and Resource Availability

The only resource that depressive symptoms predicted was education. Participants with higher depression scores reported less education ($b = -.07, SE = .04, t[78] = -2.05, p = .044$). However, depression only predicted 5% of the variance in years of education ($R^2 = .051, F[1, 78] = 4.20, p < .044$). Depression did not predict income, employment, health insurance or self-esteem (see Table 13).
Discussion

The Vulnerable Populations Conceptual Model (Flaskerud & Winslow, 1998) was useful in increasing our understanding of the relationship between IPV, depression and resource availability. As the original conceptual model describes, the lack of access to certain resources make individuals more vulnerable to exposure to risks. In this study income and self-esteem were predictive of exposure to IPV (i.e., physical and/or sexual abuse by a current or recent intimate partner). However, unlike the model describes, a higher income did not have a protective effect against IPV. On the contrary, those with higher income were slightly more likely to report being a victim of IPV. There are various hypotheses that can explain this phenomenon. Perhaps a female that is generating income provides the relationship with additional stressors (e.g., expectation for more shared decision making, more hours put into employment) that places a couple at risk for conflict, an established risk factor for husband to wife assault in Hispanic families (Aldarondo, Kantor & Jasinki, 2002). It may disturb the power dynamics in a traditional Hispanic household in where the male may be viewed as the provider and the female as the homemaker. Once a female begins to work and generate income, and hence build a stronger power base, their partner may use aggression to reestablish their control in the relationship. This explanation is in line with the Duluth model (Pence & Paymar, 1999), which describes IPV as being rooted in imbalances between power and control. This hypothesis was also supported by a study conducted by Macmillan and Gartner (1999) in where it was noted that female employment was a risk factor for IPV when her partner was unemployed. Although this study suggests that higher income is a risk factor for IPV among this population, more rigorous research is needed to confirm the strength and
direction of this relationship and to describe the role that gender roles and power and control play in this relationship.

Self-esteem was another resource that was associated with exposure to IPV. Those with a higher self-esteem were 14% less likely to report IPV. Although self-esteem was not included as a resource in Flaskerud and Winslow’s original framework (1998), other researchers that have utilized this model have stressed the importance of also considering intrinsic protective factors such as life satisfaction, mastery and resilience (Heilemann et al., 2002). A higher self esteem may protect Hispanic females from being exposed to IPV in that individuals with a higher self-esteem may believe that they do not deserve to be in an abusive relationship. This was supported by the qualitative findings of Project DYVA (see Chapter 2). However, because this study was cross-sectional, one cannot ascertain if in fact, self-esteem is a risk factor for IPV, or rather related to IPV in that it is highly correlated with depression. Access to health insurance was not related to exposure to IPV. However, health insurance status was used as proxy for access to care. It is unknown if in reality the lack of insurance translates into lack of health care in this population. Perhaps if other variables were examined (e.g., encounters with mental health professionals, perceived trustworthiness of healthcare providers) more could have been learned about the role that access to health care has in placing this community at risk for IPV and depression.

There was also a strong relationship established between IPV and depression. Exposure to IPV had a strong effect on depression scores, with participants reporting exposure to IPV with a mean of almost six points higher in their CES-D scores than participants who did not, even when controlling for age. Childhood exposure to sexual or
physical abuse was not included in the final model because it was not a significant predictor of depression scores when age and IPV were also considered. Pico-Alfonso and colleagues (2006) also came across similar findings. Although childhood abuse had an effect on depressive symptoms in univariate models, they no longer had an effect in multivariate models when IPV was also included. Golding’s meta-analysis (1999) also demonstrated that the risk for depression among women who had experienced IPV was higher than the risks for depression among those reporting childhood sexual assault. In turn, depression was predictive of exposure to IPV when included as the only independent variable. When income and self-esteem were included in the model, depression scores were no longer a significant predictor. In order to clarify this relationship, the relationship between depression and IPV needs to be reexamined with a larger sample because this finding may be due to having insufficient power to detect an effect of depression scores on risk for IPV. However, this study suggests that the relationship between depression scores and IPV is bidirectional. As the Vulnerable Populations Conceptual Model describes, exposure to IPV appears to lead to increased depressive symptoms and higher depressive symptoms appears to place Hispanic women participants at risk for IPV.

In addition to the fact that self-esteem was predictive of IPV, which was in turn predictive of depressive symptoms, depressive symptoms were predictive of employment status. However, depressive symptoms only appeared to explain a very small amount of variance in this variable (5%). Although income and self-esteem predicted IPV, which in turn predicted depression scores, depression scores did not predict income and self-esteem, or any other resource included in the model (i.e., education, insurance status).
Perhaps if other variables that measured constructs that were more social in nature, such as family support or social cohesion, or measured power differentials between partners, other relationships would have emerged. In the future, these constructs should be considered when exploring the relationship between IPV, depression and resource availability.

Although the purpose of this study was not to assess the prevalence of IPV, one can not overlook the alarmingly high frequencies of IPV that were documented in this study. In fact, 30.0% of participants reported being a victim of sexual and/or physical abuse by their current or most recent intimate partner. These rates are much higher than those reported in other studies utilizing nationally representative samples of Hispanic women. For example, in the National Violence against Women Survey, only 24.8% of women reported being physically or sexually abused in their lifetimes (Tjaden & Thoennes, 2000). However, the frequencies of abuse reported in this study are comparable to those documented among other community-based studies including hard to access Hispanic women (Hazen & Soriano, 2007). These differences may also be due to the fact that research studies targeting IPV typically measure more severe forms of physical and sexual abuse (e.g., rape) and include more questions relating to specific acts of abuse. In this study, participants where asked if they were sexually or physically abused by an intimate partner and were provided with few specifying questions. This allowed participants to identify abuse as they perceived it. For example, many women reported being sexually abused by their husbands because they would obligate them to have sex with them even when they were not “in the mood.” In studies utilizing widely used measures for abuse, for example the Conflict Tactics Scale (Strauss, Hamby,
Bonney-McCoy & Sugarman, 1996), this category of “forced sex” that was captured in this study may be missed. Another reason why rates of abuse among this sample may be so high was because participants consisted of a convenience sample recruited mostly from a well trusted community organization. Because the research team advertised Project DYVA as a study that explored substance abuse, violence and risky behaviors among Hispanic women, it is likely that women who had experiences with some of these issues were attracted to the study and felt comfortable disclosing information about sensitive issues.

There are additional methodological limitations that must be considered when interpreting the results of this study. It is important to note that data collected in this study was entirely self-reported and therefore subject to a wide range of biases. It is likely that participants that experienced IPV may be more likely to recall events and situations (i.e., depressed mood) as a result of the event (recall bias). Additionally, because such sensitive topics were discussed, participants may have not felt comfortable accurately describing their experiences with violence and mental health. The DYVA research team utilized female, bicultural and bilingual interviewers that were trained in helping the participants feel safe and comfortable to address recall and reporting biases. Second, the study utilized a cross-sectional design in where information about history of abuse, depression and resource availability were collected at the same time. Because participants were neither followed over time, nor compared to a control group, antecedents and consequences of IPV and depression are difficult to identify. Third, the reported findings were obtained from a study that utilized a convenience sample of Hispanic women from South Florida that were very heterogeneous in regards to their countries of origin and
other socioeconomic and demographic characteristics. Therefore, the results of this study can not be generalized to different Hispanic communities in the U.S. or in Florida who are different in regards to these characteristics. Last, the study was limited by a small sample size. This compromised the power the statistical analyses had to detect effects and therefore provide strong evidence for the relationships established between variables. In order to confirm and clarify the results of this study, additional studies that utilize more rigorous designs are needed.

Implications

Despite its limitations, the findings from this study have several implications for research, practice and policy. The remarkably high rate of IPV within this population underscores the need to conduct more research about the risk factors and consequences of IPV among Hispanic women in the community. In order to do so, researchers need to develop creative ways to address the various socioeconomic, language and cultural barriers that have traditionally kept Hispanic women from participating in research. It is also important to learn more about the role that resource availability among Hispanics play in increasing risks for and protecting against IPV and depression. Although the Vulnerable Populations Conceptual Model was helpful in conceptualizing some important resources that play a role, the original model does not include potential individual resources such as self-esteem that may be involved. This study supports the importance of incorporating self esteem and similar constructs (e.g., self-efficacy) as resources. Additionally, the Vulnerable Populations Conceptual Model does not include cultural factors that may be related to vulnerabilities among Hispanic communities. Considering that Hispanics and other high risk groups are heterogeneous and
consequently ascribe to varying cultural beliefs that impact behaviors and risks for exposures, adding a cultural component to the model appears to be important in increasing our understanding about vulnerabilities among this group.

This study confirms the strong relationship between IPV and depression among Hispanic women and identifies specific resources that are associated with exposure to IPV and depression. This information can be used by program planners, health providers and policy makers to inform practice, programs and policies directed towards this community. Given the high rates of IPV among this population, it is important for health providers to screen Hispanic women for IPV. If abuse is identified, it is also important to link women with mental health services, especially for those reporting low self-esteem and depression. However, in light of the limited access to health care that is noted among this population, these activities need to be administered in trusted community-based settings and through other non-traditional venues (e.g., training community members to screen for IPV and depression). Although access to insurance was not found to be a significant predictor of IPV among this population, the low rates of access to insurance may limit the opportunities Hispanic women have to be screened for abuse and appropriately referred to mental health services. By developing policies that increase Hispanics’ access to health care (e.g., expanding Medicaid coverage, controlling health insurance rates, greater funding for community-based organization providing care to indigent populations) more women can access the medical and mental health services that they so urgently need.

Given the high rates of IPV among this community, its strong association with depression and other negative physical and mental health outcomes, and the cost involved
in treating victims, perpetrators and witnesses of abuse, the best way to address IPV among this population is through the development of primary prevention programs. These programs need to target the resources that negatively or positively impact vulnerabilities associated with IPV and aim to reduce the incidence and prevalence of IPV within the community. Activities that aim to increase Hispanic women’s positive perception of themselves and reduce relationship stressors that may related to income or other resources must be targeted. The use of participatory methods in intervention research and program development, in where the members from the targeted community are involved in the development, implementation and evaluation of these programs, will help address additional important social, cultural and environmental resources and risk factors that play a role in IPV and mental health among this population (Flaskerud & Winslow, 1998).
CHAPTER 5: DISCUSSION

Major Dissertation Findings

Substance Abuse, IPV and Risks for HIV are Intersecting Conditions

One of the most important findings of this dissertation is that substance abuse, intimate partner violence (IPV), and risk for HIV are intersecting conditions. In the content analysis of the focus group data (Chapter 2), participants often spoke about these three issues interchangeably, as if they were part of one greater condition. The study examining the relationships between these conditions from a quantitative perspective (Chapter 3) also supported the intersecting nature of these variables. Although participants who reported being frequently under the influence of alcohol or drugs during sexual intercourse were not more likely to report being a victim of physical and/or sexual abuse by their current or most recent intimate partner, having a partner who was frequently under the influence of alcohol and/or drugs during sexual intercourse was. Similarly, although participants spoke little about their own substance abuse behaviors in the focus groups, they identified substance abuse among men as playing a major role in IPV. Other research conducted with Hispanics has documented that male substance abuse may be more closely associated with male-to-female IPV than the female’s substance abuse behaviors (Field & Caetano, 2003).

According to the results of both the qualitative and quantitative studies examining substance abuse, IPV and risky sexual behaviors among the participants of Project DYVA (Drugs and Violence in the Americas), risks for HIV also appears to be closely tied to IPV. During the focus group discussions women shared their experiences of being victimized by their intimate partners, often referring to their partner’s infidelity and high
risk sexual behaviors as part of the abuse. In the quantitative study included in Chapter 3, women reporting being a victim of IPV by their current or most recent partner were over 6 times more likely to report having a history of STIs, almost three times more likely to report having a partner with a positive or unknown history of having sex with a commercial sex worker (CSW) and five times more likely to report having a partner with a positive or unknown history of having sex with an injection drug user (IDU). Similar findings have been made by investigators examining these relationships among Hispanics in the northeastern part of the country (El-Bassel et al., 2007; Raj et al., 2004; Raj et al., 2006). Others who have written about the close association of substance abuse, IPV and HIV risk among commercial sex workers (CSWs) have come to refer to the intersection of these three conditions as the SAVA (Substance Abuse, Violence, and AIDS) syndemic (Romero-Daza et al., 2003; Singer, 1996). The results from this dissertation certainly support the idea that this syndemic also affects the lives of Hispanic women in the community with relatively low levels of reported substance abuse and individual risk factors for HIV/AIDS (e.g., low average number of lifetime sexual partners).

*IPV as the Most Salient of the Three Conditions*

IPV emerged as the most prevalent of three main conditions assessed in Project DYVA (see Figure 6). In fact, two out of the three major themes that emerged from the content analysis of the focus groups focuses on the participants’ experiences with and perceptions of IPV (i.e., “the breeding ground of abuse,” and “breaking the silence”). The high frequency of IPV was also noted in the quantitative studies (Chapters 3 and 4). Almost one third of participants (30%) reported being a victim of physical and/or sexual abuse by their current or most recent partner. An even larger proportion reported being a
victim of psychological abuse (48.8%). High lifetime rates of IPV were also noted within the second phase of Project DYVA (see Figure 7). However, the manner in which psychological abuse and lifetime history of IPV is related to substance abuse and HIV, and how the Vulnerable Population’s Conceptual Framework applies to these is outside the scope of this dissertation. Nevertheless, this area warrants future attention.

**Important Constructs to Include within Conceptual Models for IPV**

The application of the Vulnerable Populations Conceptual Framework (Flaskerud & Winslow, 1998) to the understanding of the relationship between resource availability, IPV (i.e., relative risk) and depression (i.e., health outcome) was helpful in beginning to understand some of the risks and consequences associated with IPV among this population. Out of all the socioeconomic resources entered into the model examining the relationship between resource availability (i.e., individual income, education, employment, and health insurance status) and IPV, individual income appeared to be the most important in predicting IPV. However unlike the original model described (Flaskerud & Winslow, 1998), a higher individual income was associated with an increase in risk for IPV. Although on the surface, this finding appears to be counter intuitive, the idea that women generating income may be at an increased risk for IPV can be further elucidated by the findings of the focus groups. One of the subcategories of the theme titled, “the breeding ground of abuse,” was machismo and gender inequalities. Participants perceived culturally rooted gender norms that promoted inequities in intimate relationships as one of the causes of IPV. In line with this belief, it may be possible that women who generate higher incomes challenge the “traditional” gender roles that are accepted in the Hispanic culture and lead to relationship conflict, one of the strongest
predictors of IPV among Hispanic couples (Aldarondo, Kantor & Jasinki, 2002). This hypothesis is supported by the Duluth model (Pence & Paymar, 1999), which describes IPV as being rooted in imbalances in power and control within intimate relationships. Other studies including large samples of Hispanics have documented the fact that socioeconomic resources that have traditionally been identified as risk factors for IPV among Whites do not make a significant contribution to risks when Hispanic ethnicity and relationship conflict are considered (Aldarondo et al., 2002).

Another important finding that was found across the studies included in this dissertation is the important role that self-esteem and related concepts play in IPV. In the content analysis of the focus groups, self-esteem emerged as a category under the theme of “breeding ground for abuse.” Participants described low self-esteem as being a risk factor, consequence and mechanism through which their partners abused them. More specifically, participants believed that prior to committing acts of violence, the perpetrator prepared his territory by rendering the woman’s self-esteem to so low a level that women were easily controlled and abused. Additionally, participants spoke about the importance of fostering independence and focusing on oneself when “breaking the silence” surrounding IPV and related issues. Self-esteem also appeared as an important resource that protected participants from IPV when the Vulnerable Population’s Conceptual Model was applied to this phenomenon in Chapter 4. Although self-esteem is not conceptualized as a resource by the developers of the original model (Flaskerud & Winslow, 1998), this dissertation supports the importance of including constructs relating to self-esteem, self-efficacy and self-reliance into models describing health conditions such as IPV. Perhaps by adopting concepts from behavioral models that describe the way
that individuals perceive themselves, their situations and their control over it, such as the Social Cognitive Theory (Bandura, 1989) or the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984; Folkman & Moskowitz, 2000), a better understanding of the relationship between resources, IPV and depression can be obtained.

Associated Cultural Factors

There are various cultural factors that appear to be associated with risks for substance abuse, IPV and HIV among this population. Participants of the focus groups believed that one of these factors was the adoption of more American, liberal values. Participants of the focus groups believed that as their families became more Americanized and lost their traditional family values, their communities were more at risk for abusing alcohol and drugs, becoming more violent and being infected with HIV/AIDS or other STIs. This belief was supported in part by the preliminary analysis exploring differences between the high risk and lower risk groups that were conducted in Chapter 3. Participants reporting being frequently under the influence of alcohol or drugs during sexual intercourse were more likely to score higher on the U.S. acculturation subscale of the Bidimensional Acculturation Scale (BAS) (Marin & Gamba, 1996). However, there were no differences in acculturation levels between those reporting inconsistent condom use (vs. consistent) or IPV (vs. no history of IPV). This may have been because inconsistent condom use and having a history of IPV were more frequent phenomena than substance abuse, and that these occur indiscriminately across the more and less acculturated groups of Hispanics. More research is needed to clarify the role that acculturation plays across these three conditions.
In addition to making references to the acculturation process, participants also spoke about the stress they experienced while being “uprooted in another world,” a slightly different concept than acculturation. Participants spoke about the difficulties of trying to find a compromise between the American culture and their traditional culture, the challenges their families faced because both partners usually had to work (e.g., marital conflict, interfering with child rearing), and the discrimination they faced from both Americans and other Hispanics. They believed that this stress placed their communities at risk for substance abuse, IPV and HIV. The experiences described by the participants of the focus groups have been termed Hispanic Stress and measured by some (Cervantes, Padilla, & Salgado de Snyder, 1991). Although Hispanic Stress was not measured in the quantitative phase of Project DYVA, the findings from this dissertation supports the idea that this may be an important cultural factor that has implications for all three conditions. However, the nature of the relationship between Hispanic stress and these conditions need to be elucidated in future studies.

Another cultural factor that appears to be important when discussing the experiences Hispanic women have with substance abuse, IPV and HIV and the intersection between these three is machismo and gender inequalities. The participants of the focus groups believed that the culturally ascribed values associated with being a man in the Hispanic culture, promoted risk behaviors among men such as substance abuse, infidelity, the unwillingness of using condoms and aggression. Participants believed that these ideals were so ingrained within their culture, that they themselves perpetuated “machista” behaviors by raising their male children with a gender privilege. Although machismo and gender inequalities were not measured in the quantitative phase of Project
DYVA, the findings from the focus groups suggest that this may be an underlining cultural factor that places Hispanics at risk for substance abuse, IPV and HIV and begins to explain how these three variables can be related to one another.

Limitations

There are significant methodological limitations that must be considered when interpreting the results of the three studies included in this dissertation. Although most of these apply across all three studies, there are unique limitations that apply to data collected via the focus methodology.

*Focus Group Limitations*

The topics that were openly discussed in the focus groups (i.e., substance abuse, violence and risky sexual behaviors) were very sensitive in nature. Therefore, it is likely that participants held back important information regarding these issues in fear of what other may think or disclose to others. Additionally, because participants were recruited through snowball sampling techniques (Miles & Huberman, 1994) and from a specific community based organization, many of the participants may have known each other. These participants may have felt even more embarrassed talking about the sensitive topics at hand. This may have had a major impact on the quality of the data that was collected. In order to encourage participants to feel more comfortable discussing substance abuse, violence and HIV openly, the facilitator started each focus group by emphasizing that participants did not have to disclose their personal experiences, but rather speak about the experiences of Hispanic women in the community in general. The facilitator also stressed the importance of respecting each other’s opinion and maintaining confidentiality. In spite of this limitation, the rich descriptions that emerged from the
focus groups suggest that many participants felt comfortable sharing their own personal experiences with others.

The focus group methodology is further threatened by the potential of having one or more participants dominate the discussion and influence the opinions of other members. This may cause other less vocal members of the group to feel inhibited in sharing their views and opinions, especially if they contradicted what previous participants had said. The facilitator helped guard against this by establishing ground rules that alerted participants that they may be cut-off a times to ensure that everyone had an opportunity to speak. The facilitator also stressed that there were neither right nor wrong opinions, but rather important opinions and experiences that must be heard. Throughout the focus groups, the facilitator also encouraged the less vocal participants to share their opinions. Despite these efforts, there were participants in the focus groups who spoke more than others and had greater control over the discussion. Nevertheless, varying opinions and perspectives were presented from even the less vocal participants.

Self-reported Data

It is important to note that data collected throughout the two phases of Project DYVA was entirely self-reported and therefore subject to a wide range of biases. It is likely that participants that had experiences with the conditions being studied (e.g., history of IPV) may have been more likely to recall events and situations (e.g., depressed mood) surrounding these events and conditions (i.e., recall bias). It is important to note that participants were reporting on not only their own behaviors, but also those of their partners. These measures are therefore less reliable than if it were obtained directly from their partners. In the future, research examining male-to-female IPV among Hispanics
need to include data collected directly from both the female and the male partner. Additionally, because sensitive topics were discussed, participants may have felt uncomfortable accurately describing their experiences with substance abuse, violence and risky sexual behaviors in both the focus groups and in the face-to-face quantitative interviews. The DYVA research team utilized female, bicultural and bilingual interviewers who were trained in helping the participants feel safe and comfortable and interview scripts as a means to address recall and reporting biases. The interviewers and the scripts they used emphasized confidentiality, the lack of “right or wrong” answers and the importance of having participants share their experiences accurately. Nevertheless, it is likely that participants underreported risky or undesirable behaviors and experiences.

Cross-sectional Design

The study utilized a cross-sectional design in where demographic information, acculturation, self-esteem, depression, substance abuse, violence and risky sexual behaviors were all collected at one point in time. Because participants were neither followed over time, nor compared to a control group, antecedents and consequences of the conditions under study could not be determined. Therefore, although associations were made, there is no way of knowing which condition came before or after. For example, we cannot say that depression was a consequence of IPV or that a STI was a consequence of IPV, two major associations identified in this dissertation.

Convenience Sample

The participants of Project DYVA consisted of a convenience sample of Hispanic women from South Florida who was very heterogeneous in terms of their country of origin and other socioeconomic and demographic characteristics. Therefore, the findings
may not represent the experiences of other Hispanic women in South Florida or other areas of the U.S. with different characteristics. Participants were primarily from Colombia (47.6%), Venezuela (13.4%) and Ecuador (8.5%) and did not mirror the Hispanic population of the South Florida area which is primarily Cuban and Puerto Rican (U.S. Census Bureau, 2008). Additionally, because most of the participants were recruited from a community-based organization that provided social services to Hispanics and other immigrant groups, the sample included in this study may consist of a high risk group. On the other hand, they may also represent a group of women who may be less isolated and more empowered than immigrant women who have not accessed community services.

Small Sample Size

In addition to being a biased sample, the Project DYVA was limited by a small sample size. This compromised the power the statistical analyses had to detect effects and therefore provide strong evidence for the relationships established between variables. In order to mitigate problems relating to small sample size, standards for the ratio of independent variables per cases were used in determining the number of independent variables included in the analyses and the methods that were used (e.g., method of entry of variables). Nevertheless, there is still a strong possibility that relationship between variables were not noted because a lack of statistical power (type II error). For example, in the study included in chapter 4, backward stepwise regression methods were used to determine which resources were most predictive of IPV. Because the sample size was limited and only permitted the use of three predictors in the model (Tabachnick & Fidell, 2007, p. 123), one can not say the variables that were dropped in the final model are not
related to IPV. In order to clarify the results of the finding in chapter 3 and 4 of this dissertation, additional studies that utilize more rigorous designs and larger sample sizes are needed.

**Limited information on reliability and validity**

The scales that were used to measure acculturation (Marin & Gamba, 1996), self-esteem (Rosenberg, 1965) and depression (Radloff, 1977) demonstrated to have a good reliability (Cronbach’s alphas = .80, .84, .91, respectively). However, it is unknown how well the screening questions from the Sexual History, the Partner Table and the Violence Assessment (Peragallo, Gonzalez & Vasquez, 2007) performed. Limited psychometric properties are available for these because none of these scales had three or more questions regarding the construct of interest. The high level of agreement between the IPV questions relating to physical and sexual abuse that were obtained from the Partner Table and the Violence Assessment (96.3% and 98.7% respectively) suggest good reliability. However, it is uncertain if these screening questions are good measures of substance abuse, violence and risky sexual behaviors. Future studies need to compare these measures with others that have demonstrated good reliability and validity among Hispanics (e.g. the Conflict Tactics Scale [Straus, Hamby, boney-McCoy & Sugarman, 1996]). Unfortunately, because Project DYVA was a pilot study and already included a battery of measures that lasted approximately 1.5 hours to complete, this evaluation of measures was not feasible.

**Implications**

The findings from the three studies included in this dissertation have various implications for research, practice and policy. The high rates of exposure to substance
abuse, IPV and HIV related risk factors underscore the importance of targeting these health conditions among Hispanics. Despite the fact that strong associations between these three conditions exist, as evidenced by this dissertation and previous studies (Moreno, 2007; Raj et al., 2006; Raj et al., 2004), there are currently no prevention programs reported in the literature that address these three conditions within one framework (Geilen et al., 2007). When developing culturally specific interventions aiming to prevent these conditions among Hispanic women, it appears to be important to target their partners and families. In fact, as suggested by this dissertation, targeting the partner’s substance abuse and risky sexual behaviors through treatment and prevention may be more important in addressing HIV and IPV among Hispanic women than specifically targeting their individual behaviors (e.g., women’s substance abuse and condom use). Additionally, many of the factors identified as being risk factors (e.g., the loss of traditional family norms, acculturation stress) can not be addressed without including the entire family.

In chapter 3, no differences in demographic characteristics (e.g., age, education) and acculturation levels were found between women who reported more HIV risks compared to those with lower risk and women who reported a history of IPV compared to none. Consequently, interventions need to be developed to target Hispanics across different age groups, socioeconomic conditions and levels of acculturation. Unlike with the other two conditions, participants who were more educated and acculturated were more likely to report frequent substance abuse. Therefore, more “Americanized” strategies must be incorporated in these interventions to target the prevention and/or treatment of substance abuse among the more highly acculturated subgroups within this
population. In doing so, media (e.g., English speaking TV stations) and avenues (e.g., school based interventions) that have been traditionally used when targeting substance abuse in the general U.S. population may be adapted. More research is needed to tease out the positive and negative aspects of acculturation and to learn more about how the positive aspects of acculturation can be promoted while still maintaining the traditional cultural norms within families that protect against substance abuse, IPV and HIV.

More research needs to be conducted to identify other risk and protective factors that cut across substance abuse, IPV and risk for HIV among Hispanics. This is fundamental in increasing our understanding of how these issues are related and identifying strategies that are needed to effectively target these conditions. One of the risk factors that appears to cut across these are culturally rooted gender inequities. Therefore, it essential that interventions targeting this population include strategies aimed at addressing the aspects of machismo and marianismo that may promote imbalances in power and control within intimate relationships (Amaro, Vega & Valencia, 2001). Activities that promote the more positive aspects of machismo, such as “protecting” and “providing” for the family, and marianismo, such as the “power” to produce life, can be used when designing prevention strategies for HIV and IPV among this population (Carillo & Tello, 1998; Cauce & Domenech-Rodriguez, 2002). Another risk factor that appears to cut across all three conditions is Hispanic stress. Activities that help Hispanic families cope effectively with the stressors involved in living within the American culture also should be developed. Interventions also need to include activities that aim to develop skills among women, that empower them to play a greater role in sexual decision making (e.g., greater knowledge about risk factors for HIV, communication and condom
negotiation skills) and promote healthy relationships within intimate relationships (e.g., compromise, shared decision making, honesty, respect) (National Center on Domestic and Sexual Violence, 2008). Caution must be taken however in ensuring that the empowerment and advancement of women (e.g., more negotiation power, independence) does not place them at greater risk for abuse. By including female empowerment strategies alongside strategies that promote equality within intimate relationship and the positive aspects of *machismo*, this risk could be abated. When developing these strategies special attention must also be given to differences in the acculturation levels and cultural norms and practices between partners.

The study presented in chapter 4 of this dissertation identified potential risk factors and consequences specific to IPV through the application of the Vulnerable Populations Conceptual Model to the conceptualization of resource availability, IPV and depression. This model may also be helpful in conceptualizing some of the risk and consequence of the other conditions examined in this dissertation (i.e., substance abuse and HIV risks). However, it appears that by adding constructs that refer to self-esteem, self-efficacy and self-reliance as well as cultural (e.g., machismo, Hispanic stress) and relationship (e.g., relationship conflict) constructs, models for understanding behavioral and mental health conditions among Hispanics can be improved. Considering that Hispanics and other at risk groups are heterogeneous and consequently ascribe to varying cultural beliefs that impact behaviors and risks for exposures, adding a cultural component to the model appears to be important in research aiming to understand vulnerabilities among this group.
In addition to the potential correlates of substance abuse, IPV and risk for HIV that were identified in this dissertation, the high rates of these conditions that were reported among this sample supports the routine screening of these among Hispanics. If any of these conditions are identified, it is also important to link women with appropriate physical and mental health services. Mental health services appear to be especially important for women that have low self-esteem and co-morbid depression. However, in light of the limited access to health care that was noted among the participants of this study, screening and health services may need to be administered in trusted community-based settings and through other non-traditional venues (e.g., training community members to screen for IPV and depression). Although access to insurance was not found to be a significant predictor of IPV in this dissertation, the low rates of access to insurance may limit the opportunities Hispanic women have to be screened for mental health issues and risk for HIV and appropriately referred to health services. By developing policies that increase Hispanics’ access to health care (e.g., expanding Medicaid coverage, controlling health insurance rates, greater funding for community-based organization providing care to indigent populations) more women can access the medical and mental health services that they so urgently need.

Model for Understanding Substance Abuse, IPV and HIV Risks

Based on the discussion of the main findings from this dissertation and its implications for intervention development and research, the Syndemic Model for Understanding Substance Abuse, IPV and Risk for HIV/AIDS among Hispanics was developed (see Figure 8). According to this model, substance abuse, IPV, risk for HIV/AIDS and comorbid mental health conditions (e.g., depression) are intersecting
health conditions and form part of a syndemic (Romero-Daza et al., 2003; Singer, 1996) affecting the Hispanic community. According to the Centers for Disease Control and Prevention (2005), a syndemic “is two or more afflictions, interacting synergistically, contributing to excess burden of disease in a population.” Both the qualitative and quantitative studies included in this dissertation support the idea that these conditions are linked health problem that occur in clusters. The results from the study reported in Chapter 2 and Chapter 3 suggest that there is a powerful relationship between substance abuse, IPV and risk for HIV/AIDS. The results from Chapters 2 and 4 also suggest that there is a strong relationship between IPV and comorbid mental health conditions such as depression. The intersecting nature of these conditions is at the very core of the model. At each corner of the model are individual, cultural, relationship and socio-environmental factors that appear to be important in understanding not only each of these conditions separately, but also their intersection.

Individual Factors. The results of the qualitative and quantitative studies support the idea that there are both intrinsic and extrinsic factors that are associated with substance abuse, IPV, risks for HIV and comorbid mental health conditions. This classification of individual factors (i.e., intrinsic vs. extrinsic) has been used by other researchers who have worked with similar populations and examined the relationship between depression and factors such as mastery and resilience among Hispanic women (Heilemann, Lee & Kury, 2002). Self-esteem was significantly associated with IPV in the study reported in Chapter 4 and was one of the main categories identified in the focus groups. In these focus groups, participants also spoke about how fostering independence and focusing ones attention on oneself may protect women from substance abuse, IPV
and risks for HIV. These descriptions may refer to their feelings of self-efficacy and self-reliance. This dissertation also identified extrinsic factors that were associated with these conditions. In Chapter 4, income was identified as an important predictor of IPV. Education, another extrinsic factor, was related to substance abuse (Chapter 3) and to depression (Chapter 4). Although employment was not mentioned specifically as a risk factor, participants of the focus groups identified the role that being financially dependent on a partner played in increasing one’s risk for these conditions and was therefore included in the model.

Cultural Factors. Various cultural factors appear to be related to the conditions included in the model. Acculturation was identified as a risk factor for these conditions within the focus groups (Chapter 2) and related to substance abuse in Chapter 3. The rest of the cultural factors included in this circle were identified entirely in the focus groups. Participants discussed the stressors they faced being “uprooted in another world” and how this may be related to some of the conditions. They also spoke about machismo and gender norms that promoted gender inequalities, risk behaviors among men and placed women at risk for IPV and HIV. They also mentioned the importance of breaking the silence and taboos surrounding substance abuse, violence and HIV/AIDS within Hispanic families and communities. Traditional family values and behavioral norms for women were identified as being protective against these conditions, while the more non-traditional family values and norms adopted in the U.S. were perceived as being risk factors.

Relationship Factors. The results of the focus groups also identified important relationship factors to consider in understanding these conditions among Hispanics.
Participants spoke about the role that family cohesion had in protecting children from alcohol and drugs, violence and risky sexual behaviors. Participants also mentioned the important role that support from family, friends and providers played in connected them needed community resources and helping them through difficult situations relating to these conditions. Communication emerged as a major category under “breaking the silence.” They believed that by developing better communication with their partners and children, many of the conditions could be prevented and/or addressed. Finally, participants identified relationship conflict and specific partner characteristics (e.g., being older, from a different race/ethnicity and legal status) that placed them at risk for these conditions, especially IPV.

**Socio-environmental Factors.** The factors included in this circle were also all obtained from the results of the focus groups. Participants described the obstacles they faced when trying to obtain information and access resources relating to substance abuse, IPV and HIV. These included not knowing where to go, the lack of linguistically and culturally appropriate services and the unwillingness of others to get involved (e.g., police). They also spoke about discrimination by both Hispanics and non-Hispanics. When talking about this topic, they identified that they felt discriminated against because they had to take on low-level jobs, did not know how to speak the language well and were perceived as inferior to other Hispanics who may have been in the U.S. for a longer period of time and were documented. Legal status also appeared to be an important factor that placed individuals at risk for these conditions (e.g., IPV) and interfered with their ability to access help (e.g., domestic violence related services, health care).
The Syndemic Model for Understanding Substance Abuse, IPV, Risk for HIV/AIDS and Comorbid Mental Health Conditions among Hispanics is entirely based on the results of this dissertation and is not intended to be an all encompassing explanation of how and why these conditions occur within Hispanic communities. However, it is a beginning for conceptualizing the relationships between these conditions and the underlying factors that may play a role.

Future Directions

More research is needed to clarify the relationship between substance abuse, IPV, and risk for HIV among Hispanics. Although this dissertation contributes significantly to the current state of the science regarding the intersection of these three conditions, more research is needed to clarify the exact nature and direction of these relationships. It is also important to identify risk and protective factors that cut across all three of these conditions. The Syndemic Model for Understanding Substance Abuse, IPV, Risk for HIV/AIDS and Comorbid Mental Health Conditions among Hispanics can be used guiding research that does so. In order to learn more about these phenomena, more rigorous methodologies that include control groups, longitudinal designs (e.g., case control and cohort studies) and larger, more representative, samples are needed.

The development and evaluation of interventions that target the prevention of substance abuse, IPV and risk for HIV among Hispanics is urgently needed. The results from the three studies included in this dissertation and the model that was developed based on the major findings can be used to begin this endeavor. In light of the limited access to health care that is noted among this population, interventions targeting the Hispanic community need to be administered in trusted community-based settings and
through other non-traditional venues (e.g., hair salons, media). By utilizing community-based participatory research (CBPR) methods in where the members from the targeted community are involved in the development, implementation and evaluation of these interventions, the cultural appropriateness of the intervention, the trust of the targeted community and the benefit of the community can be better ensured (Agency for Healthcare Research and Quality, 2003). Additionally important individual, cultural, relationship and socio-environmental factors that play a role in these conditions and the mental health of this population can also be identified and targeted (Flaskerud & Winslow, 1998).
CHAPTER 6: CONCLUSION

Being the largest and fastest growing minority group in the U.S. (U.S. Census Bureau, 2005), Hispanics are an important group to target in meeting the nation’s goals and objectives for Healthy People 2010 and future years (U.S. Department of Health & Human Services, 2006). Recent national studies have documented that Hispanics are disproportionately affected by the incidence and consequences of substance abuse (SAMSHA, 2005), intimate partner violence (IPV) (Caetano, Field, Ramisetty-Mikler & McGrath, 2005) and HIV/AIDS (CDC, 2007). Despite a great need to learn more about how these conditions affect Hispanic communities, few research studies have specifically focused on this population through the integration of qualitative and quantitative research methods. This dissertation describes and helps elucidate how substance abuse, IPV and HIV impacts the lives of Hispanic women in South Florida. The findings from this dissertation supports the intersecting nature of substance abuse, IPV and HIV and suggests that IPV may be the most salient one of these conditions among similar groups of Hispanic women. This dissertation also adds to the current state of the science by describing important individual (e.g., self-esteem), cultural (e.g., acculturation, machismo and gender roles), relationship (e.g., family cohesion, conflict) and socio-environmental (e.g., access to community services) factors that may be associated with these conditions. The Syndemic Model for Understanding Substance Abuse, IPV, HIV risk and Comorbid Mental Health Conditions among Hispanics that was developed from the findings reported in this dissertation can guide researchers, program planners, health providers and policy makers when developing strategies that aim to improve the health this population.
References


Figures

Figure 1. Categories and subcategories of theme # 1, “Transplantadas en otro mundo-Uprooted in another world.”

Uprooted in another World

- The impact on the family
  - The need to work interferes with children’s’ upbringing
  - Work stress destroys the marriage

- American liberal influences
  - Violence, sex and drug abuse are normal among kids in US
  - Too much independence

- Maintaining their culture
  - Sending the children to their countries so they can learn good values
  - Keeping traditional customs and traditions
  - Balance between American and Hispanic culture

- Discrimination
  - Not knowing how to speak Spanish
  - Difficulties in the work place
  - Discrimination from Americans
  - Discrimination from other Hispanics
Figure 2. Categories and subcategories of theme # 2, “Criadero de abuso- Breading ground for abuse.”
Figure 3. Categories and subcategories of theme # 3, “Rompiendo el silencio-Breaking the silence.”
Figure 4. Conceptual framework for HIV risk, substance abuse and intimate partner violence used in Project DYVA.

Note. Adapted from Wright (2006). STI = Sexually transmitted infection. IDU = Intravenous drug use. CSW = Commercial sex worker.
Figure 5. Vulnerable Populations Conceptual Model for IPV, depression and resource availability among Hispanic women.

Note. Adapted from Flaskerud & Winslow (1998).
Figure 6. Comparison of frequency of participants reporting the main conditions explored in Project DYVA (N = 82).

Note. Alcohol = Scored in the high risk categories of TWEAK (Russel, 1994); Drugs = Reported any lifetime use of illicit drugs according to the Psychoactive Drug History (Sobell & Sobell, 2003); IPV = Reported physical and/or sexual abuse within at least one of their past 5 intimate relationships; STI = Reported being diagnosed with at least one sexually transmitted disease in their lifetimes.
Figure 7. Frequency of intimate partner violence by type of abuse and period of occurrence (N = 80).

Note. Recent = reported IPV with current or most recent partner. Past 5 partners = reported IPV with at least one of their past 5 partners.
Figure 8. The syndemic model for understanding substance abuse, intimate partner violence, risks for HIV/AIDS and comorbid mental health conditions among Hispanics.

Individual Factors
- Intrinsic: Self-esteem*, self-efficacy†, self-reliance†
- Extrinsic: Income*, education*, employment†

Cultural Factors
- Acculturation*
- Hispanic stress†
- Machismo & gender norms†
- Taboos†
- Family values†
- Behavioral norms†

Intimate Partner Violence

Substance Abuse

Syndemic

Comorbid Mental Health Conditions

Relationship Factors
- Family cohesion†
- Support from family, friends, providers†
- Communication†
- Relationship conflict†
- Couple characteristics†

Socio-Environmental Factors
- Access to community resources†
- Discrimination against race, ethnicity, language and gender†
- Laws regarding legal status†

Note. †Indicates that this factor was associated with at least one of the intersecting conditions according to the qualitative results. * Indicates that this factor was associated with at least one of the intersecting conditions according to the quantitative results.
Table 1

Steps for Conducting the Qualitative Content Analysis of the Focus Group Transcripts
during the First Phase of Project DYVA

1. Read through the focus group questions/guide.
2. Read through the transcript for the first time (without making notes or coding) to get a “feel” for what is being said.
3. Re-read through the transcripts several times, keeping the research purpose in mind and moving through steps 4-6.
4. Highlight/underline significant statements (i.e., meaning units) that relate to the research questions.
5. Cluster these statements into categories [try keeping the names of the categories (codes) as close to the actual words of the participants; i.e., “in-vivo codes”].
6. Cluster categories into major themes, identifying different subcategories of these themes if any.
7. Once the themes have been identified, reread the transcript to make sure that all the significant statements and subcategories can be “captured” by the themes. If not, revise the themes (Mayring, 2000).
8. Participate in conference calls and email discussions about identified themes and categorizations until consensus is met.

Note. These steps were adapted from the following qualitative researchers: Flink, Paavilainen & Astedt-Kurki (2005), Krippendorff (2004) and Mayring (2000).
Table 2

*Characteristics of a Community Sample of Hispanic Women Participating in Project DYVA (Drugs and Violence in the Americas) - Continuous Variables (N = 82)*

<table>
<thead>
<tr>
<th></th>
<th>Mean (M)</th>
<th>Range</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>39.28</td>
<td>(19-60)</td>
<td>10.91</td>
</tr>
<tr>
<td>Years in the U.S.</td>
<td>9.31</td>
<td>(0.25-44)</td>
<td>8.26</td>
</tr>
<tr>
<td>Number of Children</td>
<td>1.68</td>
<td>(0-5)</td>
<td>1.23</td>
</tr>
<tr>
<td>Number of children living with participant</td>
<td>1.17</td>
<td>(0-3)</td>
<td>1.00</td>
</tr>
<tr>
<td>Participant monthly income (US dollars)</td>
<td>493.05</td>
<td>(0 – 4,200)</td>
<td>791.90</td>
</tr>
<tr>
<td>Household monthly income (US dollars)</td>
<td>2,766.35</td>
<td>(200 – 35,000)</td>
<td>3,943.07</td>
</tr>
<tr>
<td>Number of people living off of monthly income</td>
<td>3.49</td>
<td>(1-7)</td>
<td>1.19</td>
</tr>
<tr>
<td>Years of education</td>
<td>14.28</td>
<td>(0-25)</td>
<td>3.87</td>
</tr>
<tr>
<td>Non-Hispanic Acculturation (BAS)*</td>
<td>26.48</td>
<td>(15 -46)</td>
<td>6.82</td>
</tr>
<tr>
<td>Hispanic Acculturation (BAS)*</td>
<td>42.88</td>
<td>(33-48)</td>
<td>3.57</td>
</tr>
</tbody>
</table>

Note. *BAS = Bidimensional Acculturation Scale (Marin & Gamba, 1996) measuring acculturation to the U.S. (non-Hispanic Acculturation) and acculturation to the Hispanic culture of origin (Hispanic Acculturation).*
Table 3

*Characteristics of a Community Sample of Hispanic Women Participating in Project DYVA - Categorical Variables (N = 82)*

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>% (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>47.6 (39)</td>
</tr>
<tr>
<td>Venezuela</td>
<td>13.4 (11)</td>
</tr>
<tr>
<td>Ecuador</td>
<td>8.5 (7)</td>
</tr>
<tr>
<td>Honduras</td>
<td>6.1 (5)</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>4.9 (4)</td>
</tr>
<tr>
<td>Mexico</td>
<td>3.7 (3)</td>
</tr>
<tr>
<td>Peru</td>
<td>3.7 (3)</td>
</tr>
<tr>
<td>Argentina</td>
<td>3.7 (3)</td>
</tr>
<tr>
<td>Cuba</td>
<td>2.4 (2)</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>2.4 (2)</td>
</tr>
<tr>
<td>United States</td>
<td>2.4 (2)</td>
</tr>
<tr>
<td>Uruguay</td>
<td>1.2 (1)</td>
</tr>
</tbody>
</table>

Currently living with partner (Yes) 64.6 (53)

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>% (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>18.3 (15)</td>
</tr>
<tr>
<td>Single, living with partner</td>
<td>3.7 (3)</td>
</tr>
<tr>
<td>Married</td>
<td>59.8 (49)</td>
</tr>
<tr>
<td>Divorced</td>
<td>8.5 (7)</td>
</tr>
<tr>
<td>Separated</td>
<td>7.3 (6)</td>
</tr>
<tr>
<td>Widowed</td>
<td>2.4 (2)</td>
</tr>
</tbody>
</table>

High school graduate/GED (Yes) 87.8 (72)

University graduate (Yes) 42.7 (35)

Currently employed (Yes) 40.2 (33)

Health insurance status (Yes) 35.4 (29)

<table>
<thead>
<tr>
<th>How health care is paid for</th>
<th>% (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private (via work)</td>
<td>14.4 (11)</td>
</tr>
<tr>
<td>Private (self-paid)</td>
<td>7.3 (6)</td>
</tr>
<tr>
<td>Medicaid/Medicare</td>
<td>6.1 (5)</td>
</tr>
<tr>
<td>Complete payment in cash</td>
<td>30.5 (25)</td>
</tr>
<tr>
<td>Has not accessed health care</td>
<td>19.5 (16)</td>
</tr>
<tr>
<td>Other</td>
<td>23.3 (19)</td>
</tr>
</tbody>
</table>

Acculturation (BAS)*

| High non-Hispanic acculturation     | 35.4 (29) |
| High Hispanic acculturation        | 100.0 (82) |
| High on both (Bicultural)          | 35.4 (29) |

Note. *BAS = Bidimensional Acculturation Scale (Marin & Gamba, 1996) measures Hispanic, Non-Hispanic acculturation and biculturalism independently and therefore, scores do not need to add up to 100%.
Table 4

*Frequency of Reported HIV Risks, Substance Abuse and Intimate Partner Violence among a Community Sample of Hispanic Women and their Current or Most Recent Partners (N= 80)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>% (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participant HIV Risks</strong></td>
<td></td>
</tr>
<tr>
<td>Inconsistent condom use</td>
<td>93.8 (75)</td>
</tr>
<tr>
<td>History of STI</td>
<td>15.0 (12)</td>
</tr>
<tr>
<td><strong>Partner HIV Risks (yes or suspected)</strong></td>
<td></td>
</tr>
<tr>
<td>History of STI</td>
<td>42.7 (35)</td>
</tr>
<tr>
<td>IDU</td>
<td>7.5 (6)</td>
</tr>
<tr>
<td>Sex with men</td>
<td>6.3 (5)</td>
</tr>
<tr>
<td>Sex with CSW</td>
<td>40.0 (32)</td>
</tr>
<tr>
<td>Sex with IDU</td>
<td>18.8 (15)</td>
</tr>
<tr>
<td><strong>Substance Abuse (frequent)</strong></td>
<td></td>
</tr>
<tr>
<td>Participant drunk during sex</td>
<td>26.3 (21)</td>
</tr>
<tr>
<td>Participant high during sex</td>
<td>1.3 (1)</td>
</tr>
<tr>
<td>Partner drunk during sex</td>
<td>27.5 (22)</td>
</tr>
<tr>
<td>Partner high during sex</td>
<td>5.0 (4)</td>
</tr>
<tr>
<td><strong>Intimate Partner Violence with Current or Most Recent Partner</strong></td>
<td></td>
</tr>
<tr>
<td>Physical and/or Sexual</td>
<td>30.0 (24)</td>
</tr>
<tr>
<td>Physical</td>
<td>28.8 (23)</td>
</tr>
<tr>
<td>Sexual</td>
<td>12.5 (10)</td>
</tr>
<tr>
<td>Psychological</td>
<td>48.8 (39)</td>
</tr>
<tr>
<td>At least one form</td>
<td>51.3 (41)</td>
</tr>
<tr>
<td>Two or more types of abuse</td>
<td>27.5 (23)</td>
</tr>
</tbody>
</table>

*Note. STI= Sexually transmitted infection. IDU = Intravenous drug use. CSW = Commercial sex worker.*

*Two participants reported never being in an intimate relationship and were excluded from the analysis.*
Table 5

Differences in Demographics and the Bidimensional Acculturation Scale between High Risk and Lower Risks DYVA Participants in Regard to Consistent Condom Use, Participant’s Substance Abuse and Intimate Partner Violence (N = 80)

<table>
<thead>
<tr>
<th></th>
<th>Condom Use</th>
<th>Substance Abuse</th>
<th>Intimate Partner Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>t-test</td>
</tr>
<tr>
<td>Age</td>
<td>31.00</td>
<td>39.83</td>
<td>-1.84</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years in the U.S</td>
<td>2.47</td>
<td>7.73</td>
<td>-1.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>14.20</td>
<td>14.24</td>
<td>-.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>504.00</td>
<td>480.13</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAS- Hispanic</td>
<td>43.20</td>
<td>42.84</td>
<td>.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAS- Non-Hispanic</td>
<td>24.60</td>
<td>26.52</td>
<td>-.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. BAS= Bidimensional Acculturation Scale (Marin & Gamba, 1996). aReported frequently being under the influence of alcohol or drugs during sexual intercourse with current/most recent partner. * p < .05.
Table 6

The Relationship between Being Under the Influence of Alcohol and/or Drugs During Sexual Intercourse (Participant’s Substance Abuse) and HIV Risks Among a Community Sample of Hispanic Women (N = 80)

<table>
<thead>
<tr>
<th></th>
<th>Infrequent</th>
<th>Frequent</th>
<th>OR (95%CI)</th>
<th>$\chi^2$</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participant HIV Risk$^a$</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inconsistent condom use</td>
<td>53 91.4</td>
<td>22 100.0</td>
<td>NA$^+$</td>
<td>FET</td>
<td>.315</td>
</tr>
<tr>
<td>History of STI</td>
<td>6 10.3</td>
<td>6 27.3</td>
<td>3.25 (0.92, 11.49)</td>
<td>3.59</td>
<td>.058</td>
</tr>
<tr>
<td><strong>Partner’s HIV Risk$^b$</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of STI</td>
<td>52 89.7</td>
<td>18 81.8</td>
<td>0.52 (0.13, 2.05)</td>
<td>FET</td>
<td>.450</td>
</tr>
<tr>
<td>IDU</td>
<td>5 8.6</td>
<td>1 4.5</td>
<td>0.51 (0.06, 4.58)</td>
<td>FET</td>
<td>1.00</td>
</tr>
<tr>
<td>Sex with men</td>
<td>4 6.9</td>
<td>1 4.5</td>
<td>0.64 (0.07, 6.10)</td>
<td>FET</td>
<td>1.00</td>
</tr>
<tr>
<td>Sex with CSW</td>
<td>21 36.2</td>
<td>11 50.0</td>
<td>1.76 (0.65, 4.75)</td>
<td>1.26</td>
<td>.261</td>
</tr>
<tr>
<td>Sex with IDU</td>
<td>7 12.1</td>
<td>8 36.4</td>
<td>4.16 (1.29, 13.47)</td>
<td>6.18</td>
<td>.013</td>
</tr>
</tbody>
</table>

Note. STI = Sexually transmitted infection. CSW = Commercial sex worker. IDU = Intravenous drug use. SA = Substance Abuse. $^a$Reported “yes.” $^b$Reported “yes” or “don’t know.” NA$^+$ = OR was unavailable because one of the cells was zero. FET = Fisher’s Exact Test was used because at least one of the cell counts < 5. Otherwise Chi-square test was used.
Table 7

*The Relationship between the Partner Being Under the Influence of Alcohol and/or Drugs During Sexual Intercourse (Partner Substance Abuse) and HIV Risks among a Community Sample of Hispanic Women (N= 80)*

<table>
<thead>
<tr>
<th>Partner SA</th>
<th>Infrequent</th>
<th>Frequent</th>
<th>OR (95%CI)</th>
<th>( \chi^2 )</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participant HIV Risk</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inconsistent condom use</td>
<td>52</td>
<td>92.9</td>
<td>23</td>
<td>95.8</td>
<td>1.77 (.187, 16.71)</td>
</tr>
<tr>
<td>History of STI</td>
<td>6</td>
<td>10.7</td>
<td>6</td>
<td>25.0</td>
<td>2.78 (.79, 9.73)</td>
</tr>
<tr>
<td><strong>Partner’s HIV Risk</strong>&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of STI</td>
<td>51</td>
<td>91.1</td>
<td>19</td>
<td>79.2</td>
<td>0.37 (0.10, 1.43)</td>
</tr>
<tr>
<td>IDU</td>
<td>3</td>
<td>5.4</td>
<td>3</td>
<td>12.5</td>
<td>2.52 (0.47, 13.52)</td>
</tr>
<tr>
<td>Sex with men</td>
<td>2</td>
<td>3.6</td>
<td>3</td>
<td>12.5</td>
<td>3.86 (0.60, 24.75)</td>
</tr>
<tr>
<td>Sex with CSW</td>
<td>18</td>
<td>32.1</td>
<td>14</td>
<td>58.3</td>
<td>2.96 (1.10, 7.93)</td>
</tr>
<tr>
<td>Sex with IDU</td>
<td>8</td>
<td>14.3</td>
<td>7</td>
<td>29.2</td>
<td>2.47 (0.78, 7.85)</td>
</tr>
</tbody>
</table>

Note. STI= Sexually transmitted infection. CSW = Commercial sex worker. IDU = Intravenous drug use. SA = Substance Abuse. <sup>a</sup>Reported “yes.” <sup>b</sup>Reported “yes” or “don’t know.” \textit{FET} = Fisher’s Exact Test was used because at least one of the cell counts < 5. Otherwise Chi-square test was used.
Table 8

The Relationship between Intimate Partner Violence (IPV), HIV Risks and Substance Abuse among a Community Sample of Hispanic Women (N = 80)

<table>
<thead>
<tr>
<th>Intimate Partner Violence</th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
<th>OR (95%CI)</th>
<th>(\chi^2)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant HIV Risk(^a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inconsistent condom use</td>
<td>52</td>
<td>92.9</td>
<td>23</td>
<td>95.8</td>
<td>1.77 (0.19, 16.71)</td>
<td>FET</td>
<td>1.00</td>
</tr>
<tr>
<td>History of STI</td>
<td>4</td>
<td>7.1</td>
<td>8</td>
<td>33.3</td>
<td>6.50 (1.73, 24.44)</td>
<td>FET</td>
<td>.05</td>
</tr>
<tr>
<td>Partner’s HIV Risk(^b)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of STI</td>
<td>51</td>
<td>91.1</td>
<td>19</td>
<td>79.2</td>
<td>0.37 (0.10, 1.43)</td>
<td>2.17</td>
<td>.140</td>
</tr>
<tr>
<td>IDU</td>
<td>2</td>
<td>3.6</td>
<td>4</td>
<td>16.7</td>
<td>5.40 (0.92, 31.81)</td>
<td>FET</td>
<td>.063</td>
</tr>
<tr>
<td>Sex with men</td>
<td>0</td>
<td>0.0</td>
<td>5</td>
<td>20.8</td>
<td>NA(^\dagger)</td>
<td>FET</td>
<td>.002</td>
</tr>
<tr>
<td>Sex with CSW</td>
<td>18</td>
<td>32.1</td>
<td>14</td>
<td>58.3</td>
<td>2.96 (1.10, 7.93)</td>
<td>4.80</td>
<td>.028</td>
</tr>
<tr>
<td>Sex with IDU</td>
<td>6</td>
<td>10.7</td>
<td>9</td>
<td>37.5</td>
<td>5.00 (1.53, 16.32)</td>
<td>7.91</td>
<td>.005</td>
</tr>
<tr>
<td>Participant SA during Sex(^c)</td>
<td>13</td>
<td>23.2</td>
<td>9</td>
<td>37.5</td>
<td>1.99 (0.71, 5.58)</td>
<td>1.72</td>
<td>.190</td>
</tr>
<tr>
<td>Partner SA during Sex(^c)</td>
<td>12</td>
<td>21.4</td>
<td>12</td>
<td>50.0</td>
<td>3.67 (1.32, 10.21)</td>
<td>6.53</td>
<td>.011</td>
</tr>
</tbody>
</table>

Note. STI = Sexually transmitted infection. CSW = Commercial sex worker. IDU = Intravenous drug use. SA = Substance Abuse. \(^a\)Reported “yes.” \(^b\)Reported “yes” or “don’t know.” \(^c\)Reported “frequent” use of alcohol or drugs during sex. NA\(^\dagger\) = OR was unavailable because one of the cells was zero. FET = Fisher’s Exact Test was used because at least one of the cell counts < 5. Otherwise Chi-square test was used.
Table 9

The Relationship Between HIV Risks, the Participant’s and Her Partner’s Substance Abuse Behaviors and Intimate Partner Violence among a Community Sample of Hispanic Women and their Intimate Partners (N = 80)

<table>
<thead>
<tr>
<th>Participant Substance Abuse(c)</th>
<th>Partner Substance Abuse(c)</th>
<th>Intimate Partner Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR (95%CI) (\chi^2) (p)</td>
<td>OR (95%CI) (\chi^2) (p)</td>
<td>OR (95%CI) (\chi^2) (p)</td>
</tr>
<tr>
<td>Participant HIV risk(a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condom use</td>
<td>NA(\dagger) (FET) .315</td>
<td>1.77 (0.19, 16.71) (FET) 1.00</td>
</tr>
<tr>
<td>History of STI</td>
<td>3.25 (0.92, 11.49) 3.59 .058</td>
<td>2.78 (0.79, 9.73) 2.69 .101</td>
</tr>
<tr>
<td>Partner’s HIV risk(b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of STI</td>
<td>0.52 (0.13, 2.05) (FET) .450</td>
<td>0.37 (0.10, 1.43) 2.18 .140</td>
</tr>
<tr>
<td>IDU</td>
<td>0.51 (0.06, 4.58) (FET) 1.00</td>
<td>2.52 (471, 1352) (FET) .358</td>
</tr>
<tr>
<td>Sex with men</td>
<td>0.64 (0.07, 6.10) (FET) 1.00</td>
<td>3.86 (0.60, 24.75) (FET) .156</td>
</tr>
<tr>
<td>Sex with CSW</td>
<td>1.76 (0.65, 4.75) 1.26 .261</td>
<td>2.96 (1.10, 7.93) 4.80 .028</td>
</tr>
<tr>
<td>Sex with IDU</td>
<td>4.16 (1.29, 13.47) 6.18 .013</td>
<td>2.47 (0.78, 7.85) 2.44 .118</td>
</tr>
<tr>
<td>Participant substance abuse(c)</td>
<td>8.40 (2.79, 25.34) 16.35 &lt;.001</td>
<td>1.99 (0.71, 5.58) 1.72 .190</td>
</tr>
<tr>
<td>Partner substance abuse(c)</td>
<td>8.40 (2.79, 25.34) 16.35 &lt;.001</td>
<td></td>
</tr>
</tbody>
</table>

Note: \(FET\) = Fisher’s Exact Test was used because at least one of the cell counts < 5; respective \(p\) values represents results of the FET. Chi-square test was used unless otherwise indicated. STI = Sexually transmitted infection. CSW = Commercial sex worker. IDU = Intravenous drug use. \(a\)Reported “yes.” \(b\)Reported “yes” or “don’t know.” \(c\)Reported “frequent” use of alcohol or drugs during sex. NA\(\dagger\) = OR was unavailable because one of the cells was zero.
Table 10

Logistic Regression Analyses Testing Hypothesis that Resource Availability Predicts Intimate Partner Violence (IPV) among a Community Sample of Hispanic Women - Hypothesis # 1 (N = 80)

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
<th>Wald $\chi^2$</th>
<th>p value</th>
<th>AOR(95%CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Full model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual income</td>
<td>.00</td>
<td>.00</td>
<td>4.70</td>
<td>.030</td>
<td>1.00 (1.000, 1.003)</td>
</tr>
<tr>
<td>Education</td>
<td>-.07</td>
<td>.07</td>
<td>933</td>
<td>.334</td>
<td>0.93 (0.81, 1.08)</td>
</tr>
<tr>
<td>Employment</td>
<td>1.00</td>
<td>.97</td>
<td>1.07</td>
<td>.302</td>
<td>2.71 (0.41, 17.97)</td>
</tr>
<tr>
<td>Health insurance</td>
<td>-.32</td>
<td>.57</td>
<td>323</td>
<td>.570</td>
<td>0.73 (0.24, 2.20)</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>-.15</td>
<td>.06</td>
<td>5.86</td>
<td>.016</td>
<td>0.86 (0.77, 0.972)</td>
</tr>
<tr>
<td>(b) Final model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual income</td>
<td>.00</td>
<td>.00</td>
<td>6.68</td>
<td>.010</td>
<td>1.00 (1.000, 1.002)</td>
</tr>
<tr>
<td>Self esteem</td>
<td>-.15</td>
<td>1.95</td>
<td>3.34</td>
<td>.013</td>
<td>0.86 (0.77, 0.97)</td>
</tr>
</tbody>
</table>
Table 11

*Multiple Linear Regression testing Hypothesis that IPV Predicts Depressive Symptoms among a Community Sample of Hispanic Women - Hypothesis # 2 (N = 80)*

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
<th>t-test</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Full model predicting depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.36</td>
<td>.13</td>
<td>-2.85</td>
<td>.006</td>
</tr>
<tr>
<td>Child abuse</td>
<td>2.63</td>
<td>2.78</td>
<td>.94</td>
<td>.348</td>
</tr>
<tr>
<td>IPV</td>
<td>4.92</td>
<td>3.03</td>
<td>1.63</td>
<td>.108</td>
</tr>
<tr>
<td>(b) Final model predicting depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.38</td>
<td>.12</td>
<td>-3.06</td>
<td>.003</td>
</tr>
<tr>
<td>IPV</td>
<td>5.88</td>
<td>2.85</td>
<td>2.06</td>
<td>.042</td>
</tr>
</tbody>
</table>
Table 12

*Simple and Multiple Logistic Regression Model Testing Hypothesis that Depressive Symptoms Predict IPV among a Community Sample of Hispanic Women- Hypothesis # 3*

**(N = 80)**

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
<th>Wald $\chi^2$</th>
<th>p value</th>
<th>OR(95%CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(a) Simple Logistic Regression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CES-D</td>
<td>.039</td>
<td>.020</td>
<td>3.87</td>
<td>.049</td>
<td>1.04 (1.000, 1.081)</td>
</tr>
<tr>
<td><strong>(b) Multiple Logistic Regression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual income</td>
<td>.001</td>
<td>.00</td>
<td>6.57</td>
<td>.010</td>
<td>1.001 (1.000, 1.002)</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>-.14</td>
<td>.06</td>
<td>5.05</td>
<td>.025</td>
<td>0.87 (0.77, 0.98)</td>
</tr>
<tr>
<td>CES-D</td>
<td>.04</td>
<td>.022</td>
<td>.368</td>
<td>.055</td>
<td>1.04 (1.00, 1.09)</td>
</tr>
</tbody>
</table>
Table 13

Simple Linear and Logistic Regressions Testing Hypothesis that Depressive Symptoms Predict Resource Availability among a Community Sample of Hispanic Women-

Hypothesis # 4 (N= 80)

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>b</th>
<th>SE</th>
<th>Test Statistic</th>
<th>p value</th>
<th>OR(95%CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>-3.21</td>
<td>7.22</td>
<td>-.44&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.658</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>-.07</td>
<td>.04</td>
<td>-2.05&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.044</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>-.01</td>
<td>.02</td>
<td>.20&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.659</td>
<td>0.99 (0.96, 1.03)</td>
</tr>
<tr>
<td>Health insurance</td>
<td>-.01</td>
<td>.02</td>
<td>.470&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.493</td>
<td>0.99 (0.95, 1.03)</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>-.05</td>
<td>.04</td>
<td>-1.21&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.231</td>
<td></td>
</tr>
</tbody>
</table>

<sup>Note</sup>. Test statistic differed for linear and logistic regression; <sup>a</sup>= t- test was used in linear regression for continuous outcomes; <sup>b</sup>= Wald $\chi^2$ was used in logistic regression for dichotomous outcomes
Appendix A: Focus Group Questions

GENERAL INSTRUCTIONS:
Ground Rules for the Focus Group

A. Your opinion and perspectives are necessary for this process. Your complete
   honesty as to what sorts of issues you face in your communities is extremely
   necessary. If something I am asking you about is hard to understand, please
do not hold back from saying so. This will only help me do my job better.

B. What opinions and ideas that are expressed in this room, should stay here. We
   will need to respect one another’s right to confidentiality.

C. We encourage open discussion, but you will need to speak one at a time. Since
   what each of you will have to say is extremely important in this process, it is
   necessary for us to accurately record what you have to say.

D. We only have a limited amount of time to complete this process, and therefore
   we must stay on task. If I as the moderator change the direction of the
   discussion, or have to stop someone from continuing with what they are
   saying, it will only be due to time considerations, and should not be taken
   personally. We are thankful that you have agreed to participate in the group,
   and I will do what I can so that you get done on time.

E. My role is to direct the discussion. The work that needs to be done here is
   dependent on your full participation.

1. Because women are the backbones of their communities, they are usually aware
   of the issues happening in their communities. What are some the issues facing
   communities like yours? *(List the issues. Probe for drug abuse, violence and
   STDs/HIV.)*

2. There also may be issues that women have to face almost daily in their lives with
   their husbands/boyfriends/partners. What are some of these issues? *(List the
   issues.)*

3. *(For each issue, ask the following questions. Probe for issues relating to drug
   abuse, violence and STDs/HIV.)* Describe as detailed as you can the issues:
   What kinds of people are involved? Where does it take place? What do they do?
   How does it start? What does the man do to the women? What does the woman
do to the man? How do the man and women interact with each other? How does it end? What would you like done about this?

4. What are the circumstances surrounding these conflicts? (Probe for perceived causes of each issue mentioned.)

If the women do not mention drugs, ask:

   a. Is alcohol use a problem in your community? (Probe for more information about the problem and how it affects women in their relationships with their partners.)

   b. What kinds of people are abusing alcohol? (Probe for the circumstances surrounding alcohol among women and men separately. Ask if there are any differences.)

   c. Is drug use a problem in your community? (Probe for more information about the problem and how it affects women in their relationships with their partners.)

   d. What kinds of people are abusing drugs? (Probe for the circumstances surrounding drug use among women and men separately. Ask if there are any differences.)

If the women do not mention violence, ask:

   a. Is violence a problem in your community? [Probe for violence against women in intimate relationships, at work and in the community (i.e. gangs)]

   b. What are some concerns that women in your community have about men? (Probe for drugs, violent relationships, sexual relationships with partners)
c. (For each issue, ask the following questions.) What are the circumstances
surrounding the conflict that leads to violence? How does the man react? How is
he affected? How does the woman react? How is she affected?

If the women do not mention sex, ask:

a. Sometimes women have concerns about their sexual relationships with their
husbands or boyfriends. What are some concerns women in your neighborhood
might have about sexual matters? (List these concerns)

b. Under what situations would a woman have sex when she doesn’t want to? If
substance abuse and violence is NOT mentioned, probe to find out if these
are concerns.

c. Do women in your community discuss sexual matters with their
husbands/boyfriends/partners?

d. How do women in your community protect themselves against pregnancy and
venereal or sexually transmitted diseases?

e. Do women in your community use condoms? How do women and men in your
community view using condoms? How have your experiences with condom use
been?

f. Have any of you been taught/shown how to use a condom? If yes, what types of
people have taught you?
Appendix B: Sexual Health History

SEXUAL HEALTH HISTORY

INTERVIEWER READ OUT LOUD: Now we are going to talk about some personal health issues. These might be health issues about things you do or things that might affect you. Please remember that your name does not appear anywhere in this questionnaire and that everything you say is completely private and confidential. This questionnaire will be kept in a locked office where only the research team will have access to information.

49. What types of birth control did you use in last three months? INTERVIEWER: PLEASE READ OUT ENTIRE LIST

(Circle all that apply)

- Oral Contraceptives (“The Pill” or the birth control pill)…1
- Rhythm method / calendar ………………..9
- Diaphragm…………………………………….2
- Depo Provera (injections)…………………… 10
- Intra-Urinary Device (IUD)………………………….3
- Norplant………………………………………11
- Tubal Ligation (tubes tied) or a Hysterectomy, ………4
- Withdrawal ……………………………………12
- Partner had a vasectomy…………………………5
- The Patch………………………………………13
- Female condoms (Reality ®)…………………………...6
- The Day After Pill……………………………..14
- Male condoms…………………………………….7
- NONE / No form of birth control used………....15
- Foams or Jellies or Film…………………………………8
- Other…………………………………………..16
- (SPECIFY___________________________________)

50. INTERVIEWER: ASK ONLY IF NONE WAS ANSWERED IN QUESTION 4 ABOVE (Check all that apply)

Why haven’t you used birth control during the past three months?

- Partner/Woman can’t get pregnant……..1
- Partner/Woman is pregnant now………..8
- Don’t like birth control…………………..2
- Supplies unavailable…………………..……9
- Don’t believe in birth control/Religion…3
- Steady relationship…………………………10
- Too expensive…………………..…………4
- Partner does not want ME to use any…...11
- Partner does not want to use any………..5
- Partner does not like ME to use any……12
- Partner does not like to use condoms…..6
- Postmenopausal .................................13
- Want to get pregnant……………………..7
- Other…………………………………………14
- (SPECIFY __________________________________)

51. Have you ever been tested for HIV or any other sexually transmitted diseases?

- Yes………………………….1
- No………………………….2 (INTERVIEWER: Skip Question #52)
- Don’t Know………..………88
- Refused………………….99
Which sexually transmitted disease have you been TOLD you have? *INTERVIEWER: PLEASE READ OUT THE ENTIRE LIST (Circle all that apply)*

<table>
<thead>
<tr>
<th>Number</th>
<th>Disease Description</th>
<th>NEVER</th>
<th>EVER (month/yr)</th>
<th>WITHIN THE LAST YEAR</th>
<th>WITHIN THE LAST 3 MONTHS</th>
<th>TOTAL # OF TIMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>Syphilis</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Genital Herpes/HPV/Pap Smear</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>54</td>
<td>Vaginal/Genital warts</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>Pubic lice/Crabs</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>HIV/AIDS</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>57</td>
<td>Bacterial Vaginosis</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>Hepatitis B or C</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>59</td>
<td>Gonorrhea/Clap</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Chlamydia/Urethritis/Drip</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>Trichomonas</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>Pelvic Inflammatory Disease (PID)</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>Other (SPECIFY:__________)</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

*INTERVIEWER READ OUT LOUD: Have you had any of the following symptoms without seeking medical attention? (Circle all that apply)*

<table>
<thead>
<tr>
<th>Number</th>
<th>Symptom</th>
<th>NEVER</th>
<th>EVER (Date)</th>
<th>WITHIN THE LAST YEAR</th>
<th>WITHIN THE LAST 3 MONTHS</th>
<th>TOTAL # OF TIMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>64</td>
<td>Burning</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>Discharge/Dripping</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>Pain with Intercourse</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>Lesions or skin openings</td>
<td>0</td>
<td>1 (<em><strong>/</strong></em>)</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix C: The Partner Table

**PARTNER TABLE**

**INTERVIEWER READ OUT LOUD:** In order to learn more about your health, we need to talk about your sexual practices. Please be accurate. **Remember your name does not appear anywhere on this form.** Please know there are no wrong or right answers.

68. How many different male/female sexual partners have you had.....

   a. In your lifetime? ___________ Male: _____   Female: _____
   b. In the Past three (3) months? _______________
   c. How many partners did you have forced sex with? ______

   *(INTERVIEWER: Ask if perpetrator identified in question # c was included in question # a). Return to the lifetime totals once completing Partner Tables and compare totals)*

---

**CONTINUE TO NEXT PAGE**
**INTERVIEWER READ OUT LOUD:** Think of the men/women you’ve had sex with in your lifetime. I know that this is difficult to remember, but let’s start with the most recent sexual relationship and work backwards to your first sexual relationship. Please be accurate. Remember, once again, that this is completely confidential. Your name will not appear anywhere.

<table>
<thead>
<tr>
<th>LIFETIME PARTNERS</th>
<th>Partner 1</th>
<th>Partner 2</th>
<th>Partner 3</th>
<th>Partner 4</th>
<th>Partner 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Partner’s initials</td>
<td>_____ _____</td>
<td>_____ _____</td>
<td>_____ _____</td>
<td>_____ _____</td>
<td>_____ _____</td>
</tr>
<tr>
<td>2. Gender of partner</td>
<td>Male = 1 Female = 2 DK = 88 RF = 99</td>
<td>Male = 1 Female = 2 DK = 88 RF = 99</td>
<td>Male = 1 Female = 2 DK = 88 RF = 99</td>
<td>Male = 1 Female = 2 DK = 88 RF = 99</td>
<td>Male = 1 Female = 2 DK = 88 RF = 99</td>
</tr>
<tr>
<td>3. Your age at beginning of sexual relationship</td>
<td>Years</td>
<td>Years</td>
<td>Years</td>
<td>Years</td>
<td>Years</td>
</tr>
<tr>
<td>4. Your partner’s age at beginning of sexual relationship</td>
<td>Years</td>
<td>Years</td>
<td>Years</td>
<td>Years</td>
<td>Years</td>
</tr>
<tr>
<td>5. Duration of sexual relationship:</td>
<td>Years</td>
<td>Years</td>
<td>Years</td>
<td>Years</td>
<td>Years</td>
</tr>
<tr>
<td></td>
<td>Months</td>
<td>Months</td>
<td>Months</td>
<td>Months</td>
<td>Months</td>
</tr>
<tr>
<td></td>
<td>Days</td>
<td>Days</td>
<td>Days</td>
<td>Days</td>
<td>Days</td>
</tr>
<tr>
<td>6. Partner’s ethnicity</td>
<td>Latino = 1 NON-Latino = 2</td>
<td>Latino = 1 NON-Latino = 2</td>
<td>Latino = 1 NON-Latino = 2</td>
<td>Latino = 1 NON-Latino = 2</td>
<td>Latino = 1 NON-Latino = 2</td>
</tr>
<tr>
<td>7. Did you ever have vaginal sex</td>
<td>YES = 1 NO = 2</td>
<td>YES = 1 NO = 2</td>
<td>YES = 1 NO = 2</td>
<td>YES = 1 NO = 2</td>
<td>YES = 1 NO = 2</td>
</tr>
<tr>
<td>8. How often was a condom used</td>
<td>Always = 1 Sometimes = 2 Never = 3 NA=77</td>
<td>Always = 1 Sometimes = 2 Never = 3 NA=77</td>
<td>Always = 1 Sometimes = 2 Never = 3 NA=77</td>
<td>Always = 1 Sometimes = 2 Never = 3 NA=77</td>
<td>Always = 1 Sometimes = 2 Never = 3 NA=77</td>
</tr>
<tr>
<td>9. Did you ever give oral sex</td>
<td>YES = 1 NO = 2</td>
<td>YES = 1 NO = 2</td>
<td>YES = 1 NO = 2</td>
<td>YES = 1 NO = 2</td>
<td>YES = 1 NO = 2</td>
</tr>
<tr>
<td>10. How often was a condom used</td>
<td>Always = 1 Sometimes = 2 Never = 3 NA=77</td>
<td>Always = 1 Sometimes = 2 Never = 3 NA=77</td>
<td>Always = 1 Sometimes = 2 Never = 3 NA=77</td>
<td>Always = 1 Sometimes = 2 Never = 3 NA=77</td>
<td>Always = 1 Sometimes = 2 Never = 3 NA=77</td>
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<tr>
<td>11. Did you ever have anal sex</td>
<td>YES = 1  NO = 2</td>
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<td>12. How often was a condom used</td>
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<tr>
<td>13. How often did you have sex with this partner while under the influence of alcohol</td>
<td>Frequently = 1  Occasionally = 2  Rarely = 3  Never = 4</td>
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<td>14. How often did you have sex with this partner while you were high on drugs</td>
<td>Frequently = 1  Occasionally = 2  Rarely = 3  Never = 4</td>
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<td>15. How often did you have sex with this partner while he/she were under the influence of alcohol</td>
<td>Frequently = 1  Occasionally = 2  Rarely = 3  Never = 4</td>
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<tr>
<td>16. How often did you have sex with this partner while he/she were high on drugs</td>
<td>Frequently = 1  Occasionally = 2  Rarely = 3  Never = 4</td>
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<td>17. Aside from sex, how often was this partner drunk</td>
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<td></td>
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<td>18. How often was this partner high on drugs</td>
<td>Frequently = 1  Occasionally = 2  Rarely = 3  Never = 4</td>
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<td>19. Did this partner ever injected drugs</td>
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<td>20. Did this partner ever have sex w/ men</td>
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<td>21. Did this partner ever had sex with an IV drug user</td>
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<td>23. Did this partner ever get tested for HIV/AIDS</td>
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<td>24. Did this partner ever get tested for any other sexually transmitted disease</td>
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<td>26. What STD was the partner tested for</td>
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<td>Gen.Herpes....2</td>
<td>Warts/HPV....3</td>
<td>Pubic lice....4</td>
<td>HIV/AIDS....5</td>
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<td>Gen.Herpes....2</td>
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<td>Pubic lice....4</td>
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<td>Pubic lice....4</td>
<td>HIV/AIDS....5</td>
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<td>27. What were the results Investigator: Write the code of the positive results found in question #26</td>
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<td>28. Where you ever forced to have sex in this relationship</td>
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29. Did this **partner** ever hit or hurt you in any way

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30. Did this **partner** ever scream or yell at you in a way that it made you feel scared

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31. Did **you** ever feel like you needed to call someone for help because of this partner’s behavior

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32. Did **you** ever have to leave home because of this partner’s behavior

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33. Did **you** ever seek medical attention because of this partner’s behavior

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34. Did **you** ever have to call the police because of this partner’s behavior

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Appendix D: The Violence Assessment

VIOLENCE ASSESSMENT

INTERVIEWER READ OUT LOUD: Now I’m going to ask you some questions about things that might have happened to you, your family or friends. This section is different than the previous ones because there are no choices to pick from. Instead, I will ask you about certain situations and you will describe in your own words what happened.

70. Have you ever had a close friend, family member or coworker who died of a drug related accident, gang violence, murder or any other violent death, HIV/AIDS, or suicide?
   a. YES……………………1 NO……………………2 (SKIP to #71)
   . If YES, please SPECIFY….

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<th>Relationship to you</th>
<th>Age of deceased</th>
<th>Sex of deceased</th>
<th>Cause of Death</th>
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<td>d.</td>
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<tr>
<td>f.</td>
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</tbody>
</table>

Please write down code for RELATIONSHIP TO YOU
1= Partner (girl/boyfriend, spouse) 2=EX-Partner 3=Friend 4=Sibling 5=Parent 6=Other blood relative relationship 8=Step Parent 9=Step Sibling 10=Coworker
Please write down code for CAUSE OF DEATH when possible:
1=Drug?Alcohol OD 2=Drug/Alcohol Accident 3=Gang related 4=Murder 5=HIV/AIDS 6=Suicide 7=Work violence Write in all others w/ detail

71. Has anyone close to you ever been in a gang?
   YES……………………1 NO……………………2 DON’T KNOW…………………88 REFUSED…….99

72. Have you ever been in a gang?
   YES……………………1 NO……………………2 DON’T KNOW…………………88 REFUSED…….99
73. Were you ever **physically** abused or beaten before the age of 18?

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<td>Your age when it ended</td>
<td>Person’s age when it began</td>
<td>Relationship to you</td>
</tr>
<tr>
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**INTERVIEWER:** If woman is unsure of perpetrator’s age, then probe if individual thinks perpetrator was in their 20’s, mid 30’s, 40’s etc…..

Please write down code for **RELATIONSHIP TO YOU:**

1=Partner  2=EX-Partner  3=Friend  4=Sibling  
5=Parent  6=Other blood relati  7=In-laws/or other Step-relation  8=Step Father  
9= Step Mother  10=Step Brother/Sister  11=Date  12=Acquaintance  
13= Nanny or housekeeper  14=Coworker  15=Stranger

74. Were you ever **sexually abused, raped/forced or sexually assaulted** before the age of 18?

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<td>Person’s age when it began</td>
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</tbody>
</table>

**INTERVIEWER:** If woman is unsure of perpetrator’s age, then probe if individual thinks perpetrator was in their 20’s, mid 30’s, 40’s etc…..

Please write down code for **WHAT HAPPENED:**

1=Raped  2=Penetration  3=Attempted Rape  4=Touched w/ other persons genitals  
5=Fondled/touched her  6=Other

Please write down code for **RELATIONSHIP TO YOU:**

1=Partner  2=EX-Partner  3=Friend  4=Sibling  
5=Parent  6=Other blood relati  7=In-laws/or other Step-relation  8=Step Father  
9= Step Mother  10=Step Brother/Sister  11=Date  12=Acquaintance  
13= Nanny or housekeeper  14=Coworker  15=Stranger
75. Were you ever verbally or emotionally abused before the age of 18? (PROBE for yelling, name calling, threats, stalking, possessiveness)

YES…………………1 NO…………………..2 (SKIP to # 76)
REFUSED…………….99(SKIP to #76)

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</table>

**INTERVIEWER:** If woman is unsure of perpetrator’s age, then probe if individual thinks perpetrator was in their 20’s, mid 30’s, 40’s etc…..

Please write down code for RELATIONSHIP TO YOU:

1=Partner 2=EX-Partner 3=Friend 4=Sibling
5=Parent 6=Other blood relatives 7=In-laws/or other Step-relation 8=Step Father
9=Step Mother 10=Step Brother/Sister 11=Date 12=Acquaintance
13=Nanny or housekeeper 14=Coworker 15=Stranger

76. Were you ever physically abused or beaten as an adult?

YES…………………1 NO…………………..2 (SKIP to # 77)
REFUSED…………….99(SKIP to #77)

<table>
<thead>
<tr>
<th>Your age when it 1st happened</th>
<th>Your age when it ended</th>
<th>Person’s age when it began</th>
<th>Relationship to you</th>
<th>Write in CODE</th>
<th>Sex</th>
<th>Ethnicity</th>
<th>What Happened</th>
<th>Write in CODE</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

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77. Were you ever sexually abused, raped/forced or sexually assaulted as an adult?

<table>
<thead>
<tr>
<th>YES…………………1</th>
<th>NO…………………2 (SKIP to # 78)</th>
<th>REFUSED……………99 (SKIP to # 78)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your age when it 1st happened</td>
<td>Your age when it ended</td>
<td>Person’s age when it began *</td>
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</tbody>
</table>

**INTERVIEWER:** If woman is unsure of perpetrator’s age, then probe if individual thinks perpetrator was in their 20’s, mid 30’s, 40’s etc…..

Please write down code for WHAT HAPPENED:

1=Raped 2=Penetration 3=Attempted Rape 4=Touched w/ other persons genitals
5=Fondled/touched her 6=Other

(Please write down code for RELATIONSHIP TO YOU:

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78. Were you ever verbally or emotionally abused as an adult? (PROBE for yelling, name calling, threats, stalking, possessiveness)

<table>
<thead>
<tr>
<th>YES…………………1</th>
<th>NO…………………2 (SKIP to next section)</th>
<th>REFUSED…99 (SKIP to next section)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your age when it 1st happened</td>
<td>Your age when it ended</td>
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