# WOMEN'S DISCLOSURE OF HIV/AIDS STATUS AND IT'S RELATIONSHIP TO INTIMATE PARTNER VIOLENCE

by

YASODA SHARMA

Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF TEXAS AT ARLINGTON

May 2012

DEDICATION

This dissertation is dedicated to my parents, and my beloved husband: Mr. H. P. Sharma, Mrs. M. D. Sharma, and Dr. Bibek Sharma.

ACKNOWLEDGEMENTS

This dissertation is a milestone in my academic career. I am grateful to a number of people who have guided and supported me throughout the research process and provided assistance for my venture. I would like to thank my Major Professor, Dr. Beverly M. Black, for her support and encouragement. I sincerely appreciate your patience and time you spent helping me complete my dissertation. Thank you for all your guidance during the process and for preparing me for a future in academia.

Thank you to each of the members of my dissertation committee: Dr. Vijayan Pillai, Dr. Fran Danis, Dr. Diane Mitschke, and Dr. Ann J. Robison. I have been fortunate to have such a helpful and supportive committee. I appreciate all the suggestions and insights you gave me regarding my project. Your guidance and knowledge have helped me improve my knowledge and dissertation.

I would also like to thank all my professors, especially Dr. Debra Woody and Dr. Vijayan Plillai who throughout my educational career have supported and encouraged me to believe in my abilities. They have directed me through various situations, allowing me to reach this accomplishment. I would like to thank all the staff members of UTA, for always being there to help me with the administrative work. I would specially like to thank Connie Quintana, Rita Hay, Nancy Ashenhart, Ginger Jackson, Nelda Lawson, Donna Pope, Gina Gonzalez-Wilson, Lydia Vella, and Plama Jaime.

I am grateful to AIDS Outreach Center of Dallas Fort-Worth for allowing me to conduct my research study there. I would also like to extend my appreciation to all of the women whose willingness to share their stories and experiences made this project possible.

I would like to thank my husband, Bibek Sharma for all his support and encouragement during the process. I could not have done this without his love and support. He believed in me and was always there for me for me through thick and thin. His love, positive strength and laughter had helped me get through this process. I am so blessed to have him in my life.

I would like to thank my parents for bringing me into this world. Although they have left for heavenly abode but their blessings are always with me. I miss them a lot and I feel blessed to have such a wonderful parents. They were my true source of inspiration. They instilled in me the value of hard-work and dedication. Words cannot express how much I appreciate their love and encouragement.

I would also like to acknowledge my siblings, specifically my sister Latta Sharma who came all the way from India to support me during the last phase of my dissertation completion. My brothers Mohan Sharma, and Ved Sharma and my other sister Ambika Sharma for tirelessly supporting my educational and career goals from India, via encouraging e-mails, phone calls and prayers. I would also like to extend my appreciation to my in-laws for their support.

Additionally, I would like to thank my friend Chloe Corbett and Sara Wei who have supported my endeavors in so many ways, including: weekly meals or coffee breaks, countless texts and e-mails of support (some with lots of emotions), and the many tearful phone therapy sessions. I would also like to thank my other friends especially Candida Madrigal, Leigh Johnson, Yesha Rai, Vaishali Shah, and María De Lourdes Martínez Avilés, for their amazing gift of friendship.

May 10, 2012

ABSTRACT

WOMEN'S DISCLOSURE OF HIV/AIDS STATUS AND

IT'S RELATIONSHIP TO INTIMATE

PARTNER VIOLENCE

YASODA SHARMA, PhD

The University of Texas at Arlington, 2012

Supervising Professor: Dr. Beverly Black

The purpose of this cross-sectional survey study is to examine the frequency and severity of physical, sexual and emotional intimate partner violence (IPV) experienced by women before and after diagnosis of HIV/AIDS. This research also examines the effect of social support on the IPV experienced by these women. During the fall of 2011, women living with HIV/AIDS and receiving services from AIDS Outreach Center located in the southwestern part of the United States were recruited to participate in a study through the purposive sampling method. They were asked to complete surveys about their HIV/AIDS diagnosis, disclosure, level of IPV experienced, and their level of social support. Sixty-four women completed the survey.

The majority (51.6%) of the research participants were African-Americans with a mean age of 46. Many women in the study were separated/divorced (34.4%); 29.7 % were married and 12.5% were cohabiting. Almost all the women (93.2%) had disclosed their HIV status to their current intimate partner and majority (71.9%) of the women's partners were HIV negative. The majority of the research participant reported experiencing all forms of IPV before their diagnosis of HIV/AIDS. Most women (71%) reported experiencing emotional abuse, 53% reported

physical abuse, and 52% reported sexual abuse. Significantly more women reported experiencing IPV after their diagnosis of HIV/AIDS (71% emotional abuse, 61% physical and 53% sexual abuse).

There was a statistically significant difference [t (63) = -2.57, p = 0.013] in the frequency of physical IPV experienced by women before (M=18.34, SD= 26.79) and after (M=26.68, SD=34.06) the diagnosis of HIV/AIDS. Similarly, there was a statistically significant difference [t (63) = -2.08, p = 0.041] in frequency of sexual IPV experienced by women before (M=5.43, SD= 6.41) and after (M=6.92, SD=7.98) the diagnosis of HIV/AIDS. The severity of all types of IPV experienced by women also significantly increased following HIV/AIDS diagnosis. The severity of physical violence [t (63) = -2.76, p = 0.008] sexual violence [t (63) = -2.34, p = 0.022] and emotional violence [t (63) = -2.54, p = 0.014] significantly increased following HIV/AIDS diagnosis.

Social support significantly predicted severity of physical, violence ($\beta$ = -.57, p<.01) and sexual violence ($\beta$ = -.16, p<.01) experienced by women living with HIV/AIDS before the diagnosis of their HIV/AIDS status. Social support ($\beta$ = -.206, p<.05) significantly predicted severity of emotional violence experienced by women after the diagnosis of HIV/AIDS. Partner's HIV status did not significantly predict the frequency and severity of physical, sexual and emotional IPV among women living with HIV infection before or after the diagnosis.

This research emphasizes the importance of teaching social work students about the co-occurrence of IPV and HIV/AIDS and how women's risk of all forms of IPV increases following diagnosis of her HIV/AIDS status. Social work educators can also help students better understand the role of the social support on the lives of women who experience IPV before and after a HIV/AIDS diagnosis.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

Figure Page

LIST OF TABLES

Table Page

# CHAPTER 1

# INTRODUCTION

## 1.1 Statement of Problem

Intimate partner violence (IPV) and Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) are two intractable social problems with huge costs to society (World Health Organization, 2010). Both IPV and HIV/AIDS threaten people's well being. The United States Department of Health and Human Service (2010) have identified IPV as a primary social concern for the coming decade. In the last three decades, the HIV/AIDS epidemic has compromised the health status of many women by increasing their vulnerability to IPV. IPV and HIV/AIDS have been subjects of intense social science research for several decades in the United States (El-Bassel, Gilbert, Wu, Go, & Hill, 2005; Maman, Campbell, Sweat, & Gielen, 2000; Wu, El-Bassel, Witte, Gilbert, & Chang, 2003). Much prior research has focused on IPV and HIV/AIDS separately. The goal of this study is to contribute toward our understanding of the dynamics of IPV among HIV/AIDS infected women.

Intimate partner violence (IPV) is "physical, sexual, or psychological harm by a current or former partner or spouse" (Center for Disease Control and Prevention [CDC], 2012). According to CDC (2012), physical violence is the use of physical force with the intention of harming the victim. It can potentially lead to injury, disability and even death. Some examples of physical violence are shoving, choking, shaking, slapping, punching, burning, and use of a weapon. Sexual violence is the exertion of physical force to coerce a victim to engage in sexual activity against his/her will. Psychological/emotional violence is the act of intimidating the victim by humiliating, exerting control on the victims' life, or by isolating the victim (CDC, 2012).

Because of its high prevalence rate, violence in all of its forms is an important public health concern in United States and globally (Afifi, Macmillan, Cox, Asmundson, Stein & Sareen, 2008; Garcia-Moreno & Watts, 2000). IPV is prevalent among both heterosexual and same-sex couples and is often a recurrent crime. Although both men and women are victims of IPV, the literature suggests that women are much more likely than men to suffer physical, sexual and emotional abuse (Coker, 2002; Leppakoski, Paavilainen & Kurki, 2011).

Several research studies have found that the yearly rates of IPV among men and women, range from 5% to 25%, and the lifetime prevalence rates of IPV range from 21% to 55% (Coker, Smith, McKeown, & King, 2002; Gielen et al., 2000a; Gielen et al., 2000b ). The Department of Justice, Bureau of Justice Statistics reports that IPV resulted in about 2340 deaths among adult males and females in the United States during 2007. Alarmingly, out of those who died, 70% were females and 30% were males (Department of Justice, 2012). Fox and Zawitz (2007), reported in the National Crime Victimization Survey, that 5.7 women per 1,000 in United States aged eighteen and older were victims of nonfatal IPV in 2006. Between 1976 and 2005, 30% of the homicides against women were committed by intimate partners (Fox & Zawitz, 2007).

IPV is associated with other various negative physical and mental health outcomes as well (Coker, Smith, Bethea, King, & McKeown, 2000; Kernic, Wolf, & Holt, 2000). IPV can result in substance abuse, elevated rates of chronic disease, risky sexual behavior, low self esteem, eating disorders, depression, alcohol abuse, and drug abuse (Center for Disease Control and Prevention, 2012). IPV also has psychological consequences, such as personality disorders, depression, and vulnerability to suicide. It can lead to an overall decrease in quality of life (Mechanic, 2004). Women experiencing IPV report disabilities which prevent them from working or which result in low performance on the job, as well as arthritis, chronic pain, frequent headaches, miscarriages and sexually transmitted diseases (Coker et al., 2000; Crowell & Burgess, 1996; Tjaden & Thoennes, 2000).

Although IPV is prevalent among people from all cultures, ethnicities, and socio-economic backgrounds, literature reports that the prevalence rate of IPV is much higher among couples with low socio-economic status and people having low levels of education (Cunradi, Caetano, & Schafer, 2002; Fox, Benson, Demaris, & Van Wyk, 2002). Thus some groups are more vulnerable to IPV than others.

Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) is an equally as devastating social problem as IPV in the United States and around the world. According to the CDC's Department of Health and Human Service report (2012), there are about 1.2 million people in United States who are living with HIV/AIDS. Every year about 50,000 people are newly diagnosed with HIV infection (CDC, 2012). Approximately 619,400 people died due to HIV/AIDS in United States since the early 1980s (CDC, 2012).

The Joint United Nations Program on HIV/AIDS (UNAIDS) and other international agencies have also recognized HIV/AIDS as an important global concern (UNAIDS, 2011). By the end of 2010, 34 million people were living with HIV infection worldwide (UNAIDS, 2011). Since 1981, when the HIV/AIDS epidemic first started, nearly 25 million people have died due to AIDS. It was further reported that by the end of the 2008, almost two million people died of HIV/AIDS worldwide (UNAIDS, 2011).

Women constitute approximately half of the 34 million people living with HIV/AIDS in the world today. Roughly 225 women between the ages of 19-24 are being infected with HIV/AIDS every hour worldwide (Centers for Disease Control and Prevention, 2009). According to the CDC, HIV/AIDS is soaring among women and adolescent girls in the United States, rising from 7% to 22% of that population between 1985 and 2002 (Starkman & Rajani, 2002). Nearly 10,000 African-American women died in United States from HIV/AIDS, during the years 2000-2003 (CDC's National Center for Injury Prevention and Control, 2007). HIV/AIDS was the primary cause of death for African-American women between the age of 25 to 44 years (CDC's National Center for Injury Prevention and Control, 2007).

Worldwide, 90% of HIV infections among young adults resulted from heterosexual intercourse (UNAIDS, 2011). A report from the CDC revealed that approximately 70% of the affected women in United States were infected through heterosexual contact, and 28 percent were infected through drug-use injections (CDC, 2007). HIV/AIDS causes physical ailments, as well as mental health issues, especially depression, and premature death (UNAIDS, 2011; CDC, 2012).

Some of the adverse physical health consequences of HIV/AIDS are debilitating illnesses which cause premature death, such as tuberculosis, gastrointestinal problems, herpes, kaposi's sarcoma, pneumonia, brain infections, fever, weight loss, yeast infections, anemia and lymphoma (CDC, 2012). Also people living with HIV infection suffer from psychological ailments, due to unexpected changes in their lives. Low levels of self esteem, anxiety disorders and depression are some of the mental health effects of HIV/AIDS on the individual having the infection (CDC, 2012; Land, Hudson, & Stiefel, 2003; Prachakul & Grant, 2003; Wight, Aneshensel, LeBlanc, 2003). Often people diagnosed with HIV/AIDS experience social problems, such as loss of social support, social isolation, stigma, and economic deprivation due to the loss of employment (UNAIDS, 2011; Pirraglia et al., 2005).

Even though, people from all cultures, races/ethnicities, and socio-economic statuses are susceptible to HIV/AIDS, as is the case with IPV, research studies find that the rate of HIV infection is higher among those belonging to ethnic minority groups and those with low socio-economic status. In United States, African-Americans and Hispanics are disparately affected by the HIV pandemic, compared to European Americans (CDC, 2012).

## 1.2 Rationale for the research study

Women are at a high risk of experiencing IPV or contracting HIV due to various social and structural risk factors such as low income, low educational levels, unemployment of the partner, young age, conservative religious ideologies of the partner, being separated/divorced, having been exposed to child maltreatment, having witnessed intra-parental violence, having

the problems of substance use, having multiple partners/infidelity and traditional gender norms of the patriarchal society (Chermack, Fuller, & Blow, 2000; Fals-Stewart, 2003; Gielen et al., 2000a; Greenfield et al., 1998). Estimates of HIV prevalence rates in the United States in 2006 found that approximately 93 out 100,000 people are HIV infected in the United States (CDC, 2008). Furthermore, the National Family Violence Survey (NFVS) (2000) estimates that 11 to 12 percent of intimate partners are affected by domestic violence. Thus out of a population of 100,000 ninety-three men and women are infected with HIV and, approximately 11 of them are likely to experience IPV. The co-occurrence of HIV and IPV has reached epidemic proportions and mandates us to learn as much as possible about that co-occurrence.

In the United States the HIV epidemic during the last three decades increased women's risk to IPV. Although many studies document the increased vulnerability of women with HIV infection to violence in their lives, and, especially violence perpetrated by their partners (Gielen et al, 2000a; Weir, Bard, & O'Brien, 2008; Williams, Wyatt, Myers, Green, & Warda, 2008), few studies (Gielen et al., 2000a; Gielen et al., 2000b; Zierler et al., 2000) have reported on how the disclosure of HIV diagnosis relates to IPV. The few studies that have looked at the important issue of HIV disclosure have primarily measured IPV at a global level, meaning that the respondents were asked broad questions, such as whether or not they experienced IPV (Zierler et al., 2000). Even though global measures are useful in beginning our understanding of how IPV relates to HIV disclosure, they fail to address important specific dynamics of IPV. A major contribution of this study is that it examined the IPV experienced by women living with HIV infection in greater depth. And it also examined how the disclosure of HIV/AIDS status relates to the type of IPV and its severity and frequency. Previous studies examining the impact of HIV/AIDS disclosure on IPV have been primarily qualitative in nature. Although these qualitative studies have provided rich data, quantitative studies are also needed, because they will provide us with a clearer, more complete picture of IPV experiences.

A final contribution of this study is its inclusion of social support. No previous study has examined the role social support may play in reducing IPV after the disclosure of HIV/AIDS status. Studies on IPV have long documented the importance of social support. Women's ability to seek security and protection during episodes of violence tends to reduce and detract from the perpetrator's ability to freely engage in violence (El-Bassel et al., 2005; Levendosky et al., 2004; Macy et al., 2005). For this reason, social support from peers, friends and family is an important determinant of the severity of IPV and was examined in this study. Social support acts not only as an important protective factor, but also contributes to the well being of the person who is vulnerable to victimization by an intimate partner (Brewin, Andrews, & Valentine, 2000; Schumm, Hobfoll, & Keogh, 2004). Research studies find that women who are abused are often socially isolated by their partners (Bonomi et al., 2006; Levendosky et al., 2004). Also, studies have consistently found that social support plays an important role in decreasing the experience of violence among victims. However, there is a dearth of literature which examines the role of social support among the women infected with HIV/AIDS and experiencing IPV. Lack of social support may be a major positive correlate of IPV, and for these women, can often act as a barrier to seeking legal, social and medical services. Therefore it is important to examine the effect of social support on IPV.

Policies to reduce and protect victims of domestic violence often focus on the social, familial, and economic aspects of IPV. With the increasing number of victims suffering from the combined effects of both HIV/AIDS and IPV, preventive and protective measures against HIV/AIDS and IPV cannot ignore the importance of co-occurrence of these public health concerns. Current policies addressing IPV need to be reevaluated to address the public health component of HIV/AIDS and current policies addressing HIV/AIDS need to be reevaluated to address IPV. The findings from this study may be helpful in informing debates and analyses of current policy and practice approaches for prevention and intervention of IPV among women living with HIV infection.

## 1.3 Purpose of the Study

The specific purpose of this study is to:

(1) To determine whether disclosure of women's HIV/AIDS status relates to the frequency and severity of IPV she experiences.

(2) To examine how social support relates to the frequency and severity of IPV experienced by women living with HIV/AIDS infection; and

(3) To examine how a partner's HIV/AIDS status relates to the frequency and severity of IPV experienced by women living with HIV/AIDS infection.

# CHAPTER 2

# REVIEW OF LITERATURE

## 2.1 Review Methods

The purpose of this study is to examine how the frequency and severity of IPV changes in a relationship when a partner becomes aware of a woman's HIV/AIDS status. It also seeks to examine how the frequency and severity of the violence is influenced by the level of support an HIV- positive woman experiences. The researcher conducted a review of empirical and non-empirical literature related to IPV and HIV/AIDS. The material covered in this literature review includes books, journal articles, governmental organization reports, and websites.

The researcher identified research studies through a systematic search of various electronic databases of the library at the University of Texas at Arlington. Databases used were Academic Search Complete, JSTOR, Elsevier, Sage, Pubmed, Psychinfo, LexisNexis Academic and Proquest Dissertation and Thesis. The researcher also used Google Scholar to locate some of the articles, and some of the research papers were selected from articles' reference lists. The researcher also reviewed articles from various interdisciplinary journals, which include *Journal of Nursing, Journal of Public Health, Journal of Urban health, Journal of Social Medicines, Journal of Psychiatry, Journal of Substance Abuse and Journal of AIDS and Behavior*. Many of articles and books selected for the purpose of this study were available in electronic or print form through the University of Texas at Arlington library database. The articles and books which were not available through UTA were obtained from the interlibrary loan system. Internet search engines like Google, Google Books and Google Scholars were also used.

Reference key words and phrases used to find articles included: violence against women and HIV/AIDS; intimate partner violence; HIV/AIDS; intimate partner violence and HIV/AIDS; intimate partner violence and its consequences; relationship between intimate partner violence and HIV/AIDS; intimate partner violence and risky sexual behavior; and partner notification of HIV/AIDS staus and intimate partner violence. Articles addressing the issues of intimate partner violence and HIV/AIDS, intimate partner violence as a risk factor for HIV/AIDS and vice-versa were also included in the review.

This literature review will help in understanding the current knowledge base about IPV and HIV and the relationships between them. It will also help in identifying the gaps in the current knowledge base on the relationship between IPV and HIV/AIDS. One of the major gaps is that the studies examining the relationship between HIV/AIDS and IPV (McDonnell et al., 2003; Sareen et al., 2009; Tortu et al., 2000; Weir et al., 2008; Zierler et al., 2000 ) generally fail to characterize and take into account a full range of experiences associated with IPV. Many studies measure IPV only at the physical and sexual level (Zierler et al., 2000) and neglect the emotional abuse. A second major gap is that IPV among the HIV/AIDS infected has been often measured at a nominal level. Participants are simply asked whether IPV occurred or not (McDonnell et al., 2003; Sareen et al., 2009; Tortu et al., 2000; Weir et al., 2008; Zierler et al., 2000). This study includes emotional abuse in its assessment of IPV. In order to gain a more in depth understanding of IPV among women who are HIV positive, it also assesses the frequency and level of severity of abuse.

This literature review examines the definitions, causes and impacts of IPV and of HIV/AIDS. The risk and the protective factors associated with IPV and HIV/AIDS are discussed. The literature review also includes a discussion of the relationship between IPV and HIV/AIDS and examines how IPV can lead to HIV/AIDS and HIV/AIDS can lead to IPV. The literature concludes with a discussion about the limitations of existing research studies.

## 2.2 Intimate partner violence

### 2.2.1 Defining IPV

"Intimate partner violence (IPV) is a physical, sexual, or psychological harm by a current or former partner or spouse" (CDC, 2012). According to Saltzman (2002) and his colleagues there are four types of IPV, namely physical violence, sexual violence, threats of physical or sexual violence and psychological or emotional violence. Physical violence is the use of physical force, which may lead to death, disability, and injury. Some of the examples of physical violence are pushing, shoving, throwing, choking, slapping, punching and burning.

Sexual violence coerces a person to engage in unwanted sexual activity because the victim fears abuse, and may be under the influence of alcohol or other drugs. Threats of physical or sexual violence include the use of words, gestures, or weapons to convey the intention of causing, harm, injury, disability or death. Psychological/emotional violence is posing a threat to traumatize the victim. Some examples of psychological/emotional abuse include humiliation, controlling, withholding information, isolating the victim from friends and family, and denying the victim access to money or other basic resources (Saltzman et al., 2002).

### 2.2.2 Impact of IPV

The impact of IPV on womens' lives is enormous. Research studies have found that IPV is associated with numerous negative physical and mental health outcomes (Coker, Smith, Bethea, King, & McKeown, 2000; Kernic, Wolf, & Holt, 2000; CDC, 2012). The immediate negative physical health outcomes of physical, sexual and psychological abuse by an intimate partner are broken bones, internal injuries, bruises, cuts, internal bleeding and murder (Brock, 2003; Tjaden & Thoennes, 2000) and the mental health consequences are anxiety disorder and substance abuse (Astin, Lawrence, & Foy, 1993; Camphell, 2002; Coker et al., 2002; Kantor, 1997; Tjaden et al., 2000). The long-term mental health consequences of IPV are post traumatic stress disorder, depression and suicidal thoughts (Campbell & Lewandowski, 1997; Kantor & Asdigian, 1997). The long-term physical health consequences of IPV are chronic pain,

gastrointestinal disorder, irritable bowel syndrome, neurological disorders and sexually transmitted diseases (Campbell et al., 2002; Coker et al., 2000; Corrigan, Wolfe, Mysiw, Jackson, & Bogner, 2003; Muelleman, Lenaghan, & Pakieser, 1996; Weinbaum et al., 2001).

Coker et al. (2000) conducted a cross-sectional research study on 1152 women aged 18 to 65 years recruited from a family-practice clinic in Alabama. Results found that women experiencing IPV reported poor physical and mental health, disability which prevented them from working, chronic pain, and sexually transmitted diseases. The study's sample consisted of 771 African- American women and 441 European-American women (Coker et al., 2000). Similarly, Mechanic (2004) found that IPV resulted in worsened physical health, lowered job performance, personality disorder, high rates of depression and attempted suicide, which led to an overall decrease in quality of life. Campbell et al. (2002) recruited 441 middle-class, working women from the Female Health Maintenance Organization of Washington, DC and compared the physical health consequences of abused women with those who had never suffered abuse. Of the 441 women, 201 had experienced IPV and 240 had never been abused. More than half of the participants were African Americans. The study found that abused women experienced a 60% higher rate of headaches, back pain, vaginal infections, digestive problems, sexually transmitted diseases, vaginal bleeding, painful intercourse, pelvic pain, urinary tract infections, loss of appetite, and abdominal pain, compared to never-abused women. Additionally, women who experienced IPV were 50% to 70% more likely to report gynecological, central nervous system, and stress-related problems, when compared to women who were never abused (Campbell et al., 2002).

### 2.2.3 Causes of IPV

There are a large number of factors associated with IPV. For example, early parenthood (Moffitt & Caspi, 1999), unemployment of the partner (Goodwin, Chandler, & Meisel, 2003; Meisel, Chandler, & Rienzi, 2003), and conservative religious ideologies of the partner are found to contribute towards the increased experiences of IPV (Perrila, 2009). While factor such

as high level of religiosity among partners appear to protect people from the experience of IPV (Cunradi, Caetano, & Schafer, 2002; Ellison & Anderson, 2001). In general, the literature on IPV discusses the determinants of IPV as the risk factors associated with it. The following section presents a summary of the existing literature on the risk and protective factors for IPV.

## 2.3 Risk and Protective Factors for IPV

The United States Centers for Disease Control and Prevention (CDC, 2012), asserts that it is very important to understand the circumstances which lead to increased or decreased experience of violence, in order to prevent further incidents from occurring in the future. Therefore it is necessary to examine the risk and protective factors and their effects on the occurrence of violence. Various theoretical models (biological, psychological, cultural and gender equality) have described the risk and protective factors for IPV in order to help us understand the concept of IPV and also to help determine what interventions or programs could possibly be applied to bring down the rate of IPV (WHO, 2010).

### 2.3.1 Risk factors

Much research has focused on the risk factors associated with IPV (Chermack, Fuller, & Blow, 2000; Fals-Stewart, 2003; Gielen et al., 2000; Greenfield et al., 1998; Rennison & Welchans, 2000; Tjaden & Thoennes, 1998; Zierler et al., 2000). Research studies done on violence and health identify the risk factors for IPV as low income, low educational levels, unemployment of the partner, young age, conservative religious ideologies of the partner, having separated/divorced marital status, having been exposed to child maltreatment, having witnessed intra-parental violence, substance use, multiple partners/infidelity and traditional gender norms of the patriarchal society (Chermack et al., 2000; Dahlberg & Krug, 2002; Fals-Stewart, 2003; Gielen et al., 2000; Greenfield et al., 1998; Rennison & Welchans, 2000; Tjaden & Thoennes, 1998; Zierler et al., 2000 ). The risk factors that will be examined in this study include low socio-economic status, ethnic/minority status, substance abuse, having a low level of education, and being separated/divorced.

#### 2.3.1.1 Low socio-economic status

IPV occurs among people belonging to all socio-economic strata. However, research has found a strong correlation between IPV and low income (Greenfield et al., 1998; Rennison et al., 2000; Tjaden & Thoennes, 1998). According to the report of the Bureau of Justice, the rate of IPV in United States is three times higher among people whose annual incomes are less than $25K, than it is for people with annual incomes of over $50K (Bureau of Justice Statistics, 2006). Using a nationally representative sample to assess the impact of family household income on IPV, Benson and Fox (2004) found that the rate of IPV was three and half time higher among the couples who reported experiencing financial strain. “The rate of IPV among people residing in disadvantaged neighborhoods was 8.7 % as compared to 4.3 % among the people residing in economically advantaged communities” (Benson et al., 2004, p. 5).

Cunradi et al. (2002) in a study with 1440 African-American, Hispanic and European American married and cohabiting couples found that low income was a significant predictor of IPV (Cunradi et.al., 2002). Collier and Tension (2003) research, done by using the National Survey of Families and Households, Wave II (NSFH2) data, which is based on the response of 3191 married females, revealed that the families whose annual household income was less than $45,000 were at a significantly higher risk of experiencing IPV. The study also indicated that debt, financial stress and unstable job status acted as contributing factors in prompting IPV (Collier et al., 2003). Results of this study are consistent with the findings of the Fox et al (2004) study, which also found that people belonging to low socio-economic status are more likely to experience IPV.

In order to develop effective interventions and resources that can help reduce IPV, it is important to understand the rate of IPV among low income couples. Gil (1996) asserted that institutionalized disparity among people due to low income leads to the occurrence of violence in a relationship. People from low-income groups are more likely to experience higher levels of stress, and this may lead to the perpetration of violence (Gelles, 1985).

Negative and undesirable life events occur in everyone's lives. However, people with low income experience far more stress in dealing with negative life events. Occurrences of negative life events lead to an increase in the level of stress among those with low income, which may, in turn, lead to the occurrence of violence in the relationship (Miranda & Green, 1999).

The relationship between socio-economic status and IPV can be explained by the fact that people in high socio-economic status "may have more resources available to them to cope with stress, as well as fewer stresses to cope with" (MacEwen & Barling,1988, p. 84). And as Straus (1990, p. 196) stated, "low income and low status occupations are indirect indicators of even more stress". Thus we can see how the people in low socio-economic strata are more vulnerable to IPV because they lack resources for coping with stressful situations. Also, low-income individuals are more likely to be depressed, have alcohol- abuse problems, and be exposed to childhood violence, which, in turn, may lead to the perpetration of violence in their intimate relationships (Straus, 1990).

2.3.1.2 Race/ethnicity

Much of the research has examined the social and demographic variables and their influence on IPV (Gielen et al., 2000; Greenfield et al., 1998; Rennison et al., 2000; Tjaden et al., 1998; Zierler et al., 2000). And these studies have identified ethnicity as one of the important demographic variables having significant influence on IPV among those who are infected with HIV (Gielen et al., 2000; Greenfield et al., 1998; Rennison et al., 2000; Tjaden et al., 1998; Zierler et al., 2000). One research study, with a nationally representative sample of men and women in the United States, found that there was no statistically significant difference in prevalence of IPV among European American and minority groups, including African Americans, Native Americans and Asian Pacific Islanders. Results found that 51.3 % of the European-American women, 52.1 % of the African-American women, 49.6 % of Asian Pacific Islanders, and 61.4 % of Native- American women experienced physical assault (Tjaden &

Thoennes, 2000). But there are other studies which suggest that IPV occurs disproportionately among women of color.

A study using a National Family Health Survey of the United States revealed that the yearly rate of IPV was 3.7 times higher among African-American people, compared to European Americans. Also the rate of IPV among Hispanics was two times higher than for European Americans (Cazenave & Straus, 1995). Likewise the Bureau of Justice statistics reported that the rate of IPV experienced by African-American women is 35% higher than for European American women and 2.5 times higher than the rate among women from other races/ethnicities (Bureau of Justice Statistics, 2001).

In a more recent study, using a nationally representative sample of married and cohabitating European-American, African-American and Hispanic couples in the United States, Caetano, Field, Ramisetty-Mikler, & McGrath (2005) found that the incidence, prevalence, and recurrence of IPV were 14% among Hispanics and African Americans and 6% among European American. The economic disparity among the different ethnic groups could also be a contributing factor for the high rates of IPV among people belonging to ethnic minority groups (Straus et al., 1995).

2.3.1.3 Substance abuse

Research studies have indicated that IPV may lead to drug and alcohol abuse, and, conversely, drug and alcohol use can lead to IPV (Testa, Livingston, & Leonard, 2003). Research studies have revealed that the rate of IPV is four to six times higher among couple who are substance abusers, (drugs or alcohol) compared to the sample of couples who do not abuse substance (Fals-Stewart, 2003; O'Farrell & Murphy, 1995).

Chase et al. (2003) assessed the amount of IPV experienced and perpetrated by the sample of 103 female alcoholic patients undergoing couple-based, outpatient alcoholism treatment. The authors found that two thirds of the women had been abused by their intimate partners before the treatment (Chase, O'Farrell, Murphy, Fals-Stewart, & Murphy, 2003). A

study among 126 males and 126 females recruited from a variety of substance-abuse treatment centers assessed the rate of IPV, and found that 57% of the participants had been either the victim or perpetrator of IPV before beginning treatment for drug or alcohol abuse (Chermack et al., 2000).

Fals-Stewart (2003) conducted a longitudinal study with 135 males with a history of perpetrating IPV to examine the temporal relationship between IPV and drinking. The results indicated that the rate of physical aggression against women was eight times higher on the days men consumed alcohol, versus the days with no alcohol consumption. It was further found that the chance of severe physical abuse was eleven times higher, and the odds of perpetrating IPV after heavy drinking (six or more drinks within 24 hours) was 18 times higher among men after heavy consumption. Also 60% of IPV incidents occurred within two hours after the consumption of alcohol by the men (Fals-Stewart, 2003).

In a study on the prevalence and risk factors for violence against women, among 1952 women seeking service from four community-based, health-care clinics in Baltimore, Maryland (McCauley et al., 1995), found that the rate of experience of violence was high among women who were living with a substance-abusing partner. Also the likelihood of current abuse increased among women who did not have insurance, were single, divorced or separated, belonged to a low socio-economic group, were abusing drugs or alcohol, and were having psychological problems such as depression, anxiety, and low self esteem (McCauley et al., 1995). Thus the study indicated that substance abuse use among low-income women, who are divorced or separated, is an important risk factor for the occurrence of violence.

According to Collins and Messerschmidt (1993) IPV is highly correlated to heavy or problem drinking, because people who drink may use the influence of alcohol as an excuse for their aggressive behavior (Collins et al., 1993). People who have a problem with substance abuse may have been exposed to violence, which may lead to the use of violence under the influence of alcohol or drugs (Collins et al., 1993). Also a strong relationship has been found

between chronic alcohol abuse and its harmful effects on the brain, which may result in aggressive behavior (Rosenbaum, 1989).

2.3.1.4 Educational status

Low educational level has also been identified as an important risk factor for IPV (Ackerson et al., 2008; Boy & Kulczycki, 2008; Boyle et al., 2009). Studies find that women who had less than a high school level of education are two to four times more likely to experience IPV, compared to those who have higher levels of education. (Ackerson et al., 2008; Boy & Kulczycki, 2008). The United States Department of Justice (2005) also identified low level of education as an important risk factor for IPV. It found that only 2.3 % of the women with college degrees experienced violence and, interestingly, women who had post graduate degrees did not experience any kind of violence. Their study also found that 3.6 % of the women who did not have any formal education and 3.4% of women with some high school experienced violence (Macmillan & Kruttschnitt, 2005).

2.3.1.5 Marital status

Research studies have consistently found a strong positive correlation between certain marital statuses and experience of violence among couples (Laub & Sampson, 2001; Sampson et al., 2006). The National Crime Victimization Survey reports that the rate of IPV is higher among “never married," "separated," and "divorced" individuals, compared to "married" individuals (Bureau of Justice Statistics, 2005; 2006a; 2006b). Waite and Gallagher ‘s (2000) study of a nationally representative sample of couples in United States revealed that rate of IPV was 4 % among the married couple, and 13 % among the cohabiting couple (Waite & Gallagher, 2000). It was further reported in another study that cohabiting couples were three times more likely to experience IPV as opposed to married couples (Waite et al., 2000).

Kenney and McLanahan (2006) similarly found higher rates of violence among cohabitating couples, compared to couples who had been married for up to five years. Thirty-one percent of cohabiting couples reported violence versus 19% among the married couples

(Kenney et al., 2006). Another national study done to examine the rate of IPV among married and cohabiting couples found the rate of violence was two times higher among cohabiting couples compared with married couples (Brownridge & Halli, 2000). The higher rate of violence among the cohabiting couples could be due to the fact that they are not married and hence are relatively free of familial alliances resulting from marital relationships. Within an intimate relationship free of familial bonds, men's patriarchal values may play an important role in the expression of "symbol of closeness and ownership" through violence (Yllo & Straus, 1981, p. 345).

2.3.2 Protective factors

Protective factors related to IPV reduce the risk of exposure to IPV. Many of these protective factors are the reverse of the risk factors just discussed. The studies identify protective factors against IPV as high levels of education, belonging to the high-income group, belonging to the dominant ethnic group (Fehringer & Hindin, 2009; Flake, 2005; Johnson & Das, 2009), being married more than 15 years (Johnson et al., 2009) and having social support (Schwartz et al., 2006). Other protective factors against IPV are a healthy relationship, which basically means having trust, respect, equality, honesty and mutual support. Healthy sexuality, (which includes consensual sex with one partner, in order to maintain intimacy in the relationship) shared responsibility, cultural equitability and the presence of appropriate boundaries in a relationship. The presence of these protective factors also diminishes the likelihood of IPV (Virginia Sexual and Domestic Alliance, 2009). However for the purposes of this research, we will also discuss social support as an important protective factor. Research has consistently found that social support is a protective factor against IPV (Meadows et al., 2005; Mitchell et al., 2006; Salazar et al., 2004).

Social support is an important factor which helps the people to combat stressful situations during the transitional period of their life cycle and when they are in a deleterious environment (Cassel, 1974; Caplan, 1974). House (1981) suggests that there are four main

types of social support: emotional, appraisal, informational and instrumental. All types of supports are provided by family, friends, relatives and significant others. Emotional support is provided by being empathetic, loving, caring and trustworthy. Appraisal support is provided through constructive feedback, and also by helping the person to evaluate himself or herself. Informational support is provided to help the person address his or her problem through advice, suggestion, and information on issues creating problems in a person's life. And finally instrumental support is helping the person in need with basic support and services such as providing food, money and child care (Carlson, McNutt, Choi, & Rose, 2002; Fowler & Hill, 2004; House, 1981; Kocot & Goodman, 2003; Rose, Campbell, & Kub, 2000).

The various kinds of social support have been found to have important positive impacts by encouraging people to take preventive measure in order to maintain their health (Glass et al., 2000). Social support may be particularly important for women and has been found to be strongly correlated to women's physical and mental health (Castaeno et al., 2008; Coker et al., 2002; 2003; Miller & Stiver, 1997). For example, in a study conducted with 1152 women between the ages of 18 and 65 at a university-associated family health clinic in South Carolina found that people who scored high in emotional support were more likely to be in good physical and mental health conditions (Coker et al., 2003). In another study with same sample of participants, Coker et al (2002) found that women who scored high on the social support scale perceived that they were at significantly lower risk to have mental and physical health problems.

Several studies have shown the important role of social support in a woman's experience with IPV. These different types of social support help victims of IPV in making difficult decisions, such as prosecuting the abuser, seeking the help from a domestic violence shelter, and encouraging a victim to see a counselor or therapist for help (Fowler et al., 2004; Kocot et al, 2003; Rose, et al., 2000; Watt, Bobrow, & Moracco., 2008).

Smith (2003) conducted a study with 191 women to examine the effects of emotional support on physical and mental-health consequences of women experiencing physical and

emotional IPV. The author found that women who scored high on emotional support had better physical and mental health, thereby suggesting that emotional support was an important protective factor for IPV (Smith, 2003). A qualitative study done on the survivors of IPV to examine the victims' readiness to disclose their experience with IPV revealed that women who felt they had better emotional support were more likely to disclose their experience of IPV and leave the abusive relationship (Watt et al., 2008).

Panchanadeswaran et al. (2008) examined the relationship between the perceived level of social support and IPV among 416 women enrolled in a methadone treatment program. They found that 44.5 % of the participants were experiencing IPV. Interviews with the women revealed that those who had a low level of perceived social support were more likely to experience IPV at a higher rate.

Castaeno and his colleague (2008) conducted a cross-sectional study among 1402 women attending a primary care center in Spain. The participants in the study were women between the ages of 18 and 65 and the study found that women who had strong social support were 89% less likely to be abused than were the women who did not have any kind of social support. Women who had social support were less likely to get abused in the future, as opposed to those who did not have any social support (Brown, 1997; Hoff, 1990).

The importance of social support as a protective factor for IPV is found among ethnic groups too. Denham et al. (2007) found among a sample of 1212 Latina women from rural North Carolina, that 19.5 % had experienced violence in their lifetimes, and the women who experienced violence were less likely to have social support, as opposed to those who did not experience violence and had strong social support. Women who experience IPV often have less social support, because the abusers often tend to isolate their partners from their social network (which includes friends and relatives) to gain control over the relationship (Ewing, Lindsey, & Pomerantz, 1984). Conversely, women who have little social support are more vulnerable to IPV. Abused women may begin to feel helplessness in their situation, which inhibits them from

seeking help, and this decreases the abuser's fear of being exposed as perpetrator, which may in turn result in increased experience of IPV among women who have less social support (Brown, 1997; Hoff, 1990).

Mitchell el al. (2003) conducted a study with 143 African-American women between the ages of 21 and 64 receiving services from an urban public health system. Of these, 65 women had experienced IPV in the past year and 78 had never experienced it. Results indicated that women who had a high level of social support were less likely to suffer from the adverse effects of IPV. Women who received various forms of support experienced increased self esteem, and gained more control over the abusive relationship. These changes in the relationship's power dynamic tended to diminish these women's experience of IPV, which, in turn, helped them to cope better with the physical and mental health consequences of IPV (Mitchell et. al., 2003).

A study of 1402 Spanish women between 18 and 65, attending a medical clinic, found that the prevalence of IPV was high among women lacking social support (Ruiz-Perez, Castano Kindelan & et al., 2005). Goodman and her colleagues (2005) also conducted a longitudinal study to examine the strategies used by women to protect themselves from being re-abused. This study was conducted among 406 African-American women and results found that women who had high level of social support were less likely to be re-abused. The results further indicated that participants in the study who had the lowest level of social support had 65% predicted probability of being re-abused within one year (Goodman et al., 2005).

As discussed above, several studies have found that social support reduces the adverse physical and mental health consequences of IPV and serves as a protective factor against IPV. However, there is a paucity of research examining the role of social support as a protective factor against IPV among HIV-infected women. This study will assess the independent effect of social support on physical, sexual and emotional violence among HIV/AIDS infected women.

## 2.4 Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome (HIV/AIDS)

### 2.4.1 Defining HIV/AIDS

Acquired Immunodeficiency Syndrome (AIDS) is a disease caused by Human Immunodeficiency Virus (HIV), which attacks the immune system of the human body. HIV makes the body more susceptible to infectious disease and this may, in turn lead to illness and death (CDC, 2012). AIDS is the last stage of HIV infection, and it might take many years after the diagnosis of HIV before the patient is diagnosed with AIDS, because getting AIDS would mean, that the body has completely lost its ability to fight infection (CDC, 2012).

### 2.4.2 Impact of HIV/AIDS

The negative consequences of HIV/AIDS are many. Those with HIV/AIDS infection and their families are plagued by numerous health problems, mental health issues, and social problems.

#### 2.4.2.1 Health problems.

People living with HIV/AIDS suffer from various physical health problems due to their compromised immune systems (Holmes et al., 2003). They are highly vulnerable to diseases such as cancer, tuberculosis, and gastrointestinal problems (Decker & Lazarus, 2000). Other research studies done in the past have found that people living with HIV/AIDS often suffer from physical ailments such as fever, diarrhea, tumors, lung infections and swollen glands (Decker et al., 2000). And, due to these conditions they tend to lose weight and become physically weak. HIV/AIDS also causes premature death (CDC, 2012).

Tuberculosis is the most common disease among the HIV infected. Tuberculosis may occur among non HIV infected also. However, those infected with HIV/AIDS are more likely to contact the disease and when they do, the health consequences are often more severe than among those not infected with HIV/AIDS (Moore, 2007; CDC, 2012). Another common disease among those infected with HIV/AIDS is Herpes. Those with HIV/AIDS suffer more severe symptoms at the occurrence of Herpes than do those without HIV/AIDS. The most deadly

outcome that is common among the HIV/AIDS infected is Kaposi's sarcoma. Also people living with HIV/AIDS are vulnerable to opportunistic infections such as pneumonia, brain infections, fever, weight loss, yeast infections, anemia and lymphoma (CDC, 2010).

2.4.2.2 Mental health issues.

People infected with HIV infection, in addition to experiencing numerous challenges to their physical health, also face many psychological issues. Due to disastrous changes in their lives, their self esteem is likely to be impacted and could result in anxiety disorders (Watstein & Chandler, 1998). According to UNAIDS (2008) anxiety is one of the psychological consequences of HIV/AIDS. People living with HIV/AIDS are often isolated from their families and society, and the fear of death evokes anxiety in peoples' lives.

Depression is also common among those with the HIV/AIDS infection. Morrison et al. (2002) conducted a study with 155 women whose ages ranged from 18 to 70 years. There were 93 HIV positive women and 62 uninfected women. The HIV/AIDS infected women were recruited from the outpatient medical clinics, county health departments, and organizations focusing on HIV/AIDS illness and care in north central Florida and the uninfected participants were recruited by inviting the enrolled participants' friends or relatives who were not infected by HIV/AIDS to participate in the study. More than half of the participants in the study were African American. Results indicated that the rate of depressive disorders was four times higher among HIV sero-positive women (19.4%), when compared with uninfected women (4.8%) (Morrison et al., 2002). In a meta-analysis done to examine the linkage between HIV/AIDS infection and vulnerability to depressive disorder, Ciesla et al. (2001) found that HIV positive participants were twice as likely to have major depressive disorder than were HIV negative participants (Ciesla et al., 2001).

HIV/AIDS also has a huge psychological impact on the families of those infected. Family members are more likely to report emotional distress due to the burden and stigma on care givers (Wight, Aneshensel, & LeBlanc, 2003). Several studies have found that the family

members of the people living with HIV/AIDS experience psychological consequences such as low self esteem, depression, and stress (Land, Hudson, & Stiefel, 2003; Wight et al., 2003). Studies further reported that, due to the caregiver's burden, thoughts of suicide are very common among the family members of the people living with HIV/AIDS (Pirraglia et al., 2005; Prachakul & Grant., 2003; Wight et al., 2003).

2.4.2.3 Social problems.

Piot (2002) asserts that HIV/AIDS is not only a medical problem but also a significant social problem. People living with the HIV/AIDS infection and their families, often have to deal with stigma, rejection and isolation (Herek & Capitanio, 1999; Martin et al., 2000). Often people living with HIV/AIDS infections belong to vulnerable and often marginalized groups such as gays and lesbians, sex workers, or injection drug users, which often further isolates them from friends and relatives (UNAIDS, 2006; Snyder et al., 1999). This may in turn affect their overall health and thereby decrease their life span.

The diagnosis of HIV/AIDS also increases the financial burden on the victim and his/her family (Kaiser, 2007). Family members may be required to help bear the financial burden of costly medications. Also the loss of employment of the infected member deepens the socio-economic hardship a family faces. Diagnosis of an HIV/AIDS infection can results in the loss of the job of the infected person. Households having an HIV/AIDS infected member tend to spend twice as much on medications when compared to the spending in households having no HIV/AIDS infected individual (Greener, 2002).

2.4.3 Causes of HIV/AIDS

HIV infection is caused when blood, semen or vaginal fluids from an infected person enter another person's body, usually through sexual contact or from sharing needles when injecting drugs, or from mother to baby during birth. HIV/AIDS can also be spread through blood transfusions or organ transplants (CDC, 2009). Also men who have sex with men, children of an

HIV infected mother, and injecting drug users are at high risk for contracting HIV/AIDS (CDC, 2011).

Women are primarily susceptible to heterosexual transmission of HIV due to the high incidence of non-consensual sex, sex without condom use, and high-risk behaviors of their partners (CDC, 2011). A report from the CDC revealed that, in the United States, approximately 70% of infected women were infected through heterosexual contact, and 28% were infected via injection drug use (CDC, 2011).

The literature on HIV/AIDS among women identifies several additional factors, such as biological susceptibility, lack of awareness of HIV/AIDS, IPV and cultural norms, which account for their vulnerability to HIV infection (Farmer, 2001; Schulz & Mullings, 2006; Solomon et al., 2003). Other studies find that the main causes of HIV/AIDS infection among women are engagement in commercial sex work, trading sex for drugs, injection drug use, and not being able to negotiate condom use with a partner who indulges in high-risk sexual behavior (Hawkes & Santhya, 2002; Solomon, Solomon, & Ganesh, 2006; Wong et al., 2004).

## 2.5 Risk and Protective Factors for HIV/AIDS

The 2010 global report of Joint United Nations Program on HIV/AIDS (UNAID), reports that, although there is no cure for HIV/AIDS, preventive measures can be taken to bring down the rate of HIV infection worldwide. In order to control the spread of HIV/AIDS, it is very important to recognize its risk factors (UNAID, 2010). Identifying risk factors will help in implementing programs that will raise awareness among people regarding HIV/AIDS and thereby reduce the likelihood of the rate of contraction of HIV/AIDS considerably (UNAID, 2010). Also, it is important to identify the protective factors to develop programming to encourage people to protect themselves.

### 2.5.1 Risk factors

According to the CDC's (2009) report on HIV/AIDS, risk factors for HIV/AIDS are sexual initiation at a young age, high-risk sexual behaviors, such as having unprotected sex, having

multiple partners, having sex under the influence of alcohol or drug, low income, having low levels of education, belonging to an ethnic minority group, having the problem of substance use, having multiple partners/infidelity and traditional gender norms of the patriarchal society (CDC, 2009). Although the risk factors for HIV/AIDS are not the focus of this study, many of the risk factors for IPV and HIV/AIDS are similar. Thus, the study will also examine socio-economic status, ethnicity and substance abuse, since these are the important factors which may play a significant role in exacerbating the high-risk behavior among men and women, which, in turn, increases their likelihood of contracting HIV infection. Since this study focuses on the relationship between IPV and HIV/AIDS, it is important to examine the factors which increase the likelihood of experiencing IPV and contracting the HIV/AIDS infection.

#### 2.5.1.1 Low Socio-Economic status

HIV/AIDS is prevalent among people from all socio-economic levels, but people in low socio-economic groups are disproportionately affected by the pandemic (CDC, 2012). Research studies have indicated that women with low socio economic status are highly vulnerable to HIV/AIDS (United Nations Joint Program on HIV/AIDS, 2004).

The CDC's Morbidity and Mortality Weekly Report stated that "unemployment, poverty, and illiteracy are correlated with decreased access to health education, preventive services, and medical care, resulting in an increased risk for HIV/AIDS" (Morbidity and Mortality Weekly Report, 1994, p. 5). The United Nations Joint Program (UNAIDS) on HIV/AIDS also reported that young women belonging to low-income households are at an elevated risk of contracting HIV/AIDS, due to their practice of high-risk behavior, including nonconsensual sex, and having multiple partners (United Nations Joint Program on HIV/AIDS, 2004).

Research on HIV/AIDS diagnosis and death revealed that the prevalence rate of HIV/AIDS, "for the period of 1990-1999, was 210.3 per 100,000 persons among low-income people in the United States, and more than 40% of the newly diagnosed AIDS cases were people from low-income levels" (Karon, Fleming, Steketee, & et al., 2001, p. 24). The rate of

death was highest among people who were below the poverty level (Karon, Steketee, & Cock, 2001).

Rubin, Colen and Bruce (2010) examined the mortality rate for HIV/AIDS among people aged 15 to 64 years in the United States, before and after the introduction of highly active antiretroviral therapy (HAART), which prolongs the infected person's life by suppressing the effects of the HIV virus. The study indicated that the rate of death was 1.4 times greater among people belonging to the lowest socio-economic group, when compared with people belonging to the highest socio-economic group. Similarly, after the introduction of HAART, the death rate was 2.7 times greater among people belonging to the low socio-economic group (Rubin et al., 2010).

Collins and Rau (2003) stated that poverty and HIV/AIDS are interconnected and "poverty is an important factor which leads to high risk behavior, and this increases the chances of contracting HIV/AIDS" (Collins et al., 2003, p. 95). Similarly, Holtgrave and Crosby's (2003) study, among a nationally representative sample of people from the United States, found that income inequality was significantly correlated with the AIDS case rate (Holtgrave & Crosby, 2003).

People with low incomes may be particularly vulnerable to HIV/AIDS, because their access to preventative information is limited and the resulting lack of knowledge about HIV/AIDS may, in turn, lead them to engage in high-risk behaviors, such as unsafe sex, having multiple sexual partners and using illicit drugs (Feldman, 1990; United Nations Population Fund [UNFPA], 2003).

Women from low socio-economic status are specifically vulnerable to HIV/AIDS because they are more likely to be sexually exploited for the financial necessities of life. They are particularly vulnerable to being introduced to the sex trade for their own survival and the survival of their families. Low-income women are also often financially and emotionally dependent on their husband for basic necessities for themselves and their children. Thus, they

may readily have sexual contact with their husband, even though he might be exhibiting risky sexual behavior. This considerably increases the woman's chances of contracting the infection (Bandura, 1992).

#### 2.5.1.2 Race/ethnicity

The HIV/ AIDS pandemic affects people across different culture and ethnic identities. But the statistical data reveals that African Americans and Hispanics are disproportionately affected. According to the CDC's, Surveillance report (2008), "1.1 million adults and adolescents (prevalence rate: 447.8 per 100,000 population) were living with diagnosed or undiagnosed HIV infection in the United States at the end of 2006" (p. 1073). Of these "46% of the infections occurred among African Americans, 36% occurred among European Americans, and 18% occurred among Hispanics" (p. 1074). Among females, 61% of infections were among African Americans, 23% among European Americans, and 16% were among Hispanics (CDC, Surveillance Report, 2008).

The highest rates of new infections occurred among African-American women (55.7 per 100,000 of population), "The HIV/AIDS prevalence rate for black women was nearly 18 times the rate for European American women , and the rate for Hispanic women was more than four times the rate for European American women" (CDC, Morbidity and Mortality Weekly Report, 2008, p. 1076). According to CDC's (2012) most recent report, HIV/AIDS was the third leading cause of death among African-American women between the age of 35-44 and the fourth leading cause of death for Hispanic women in the same age range (CDC, 2011). It was the ninth leading cause of death among European American women in United States during 2004 (CDC, 2007).

Greeley (1995, p.1) quotes Denning (1990) in stating that "race and ethnicity are not risk factors, but they are markers for other factors that put people at increased risk, like lack of health insurance and limited access to care". Factors such as low socio-economic status and low level of education are interrelated and are common among people belonging to ethnic

minority groups which result in the rate of HIV/AIDS being higher among the people in these groups (Pappas, 1994). Curtis and Patrick (1993) also contend that people belonging to minority ethnic groups are socially oppressed and have less access to information about HIV/AIDS and limited available resources. Michal-Johnson and Brown, (1992) also suggest that the lack of financial resources among the majority of people belonging to low socio-economic status results in limited access to the information and that campaigns for health awareness are less likely to reach the rural areas. As a result, persons in those areas are more likely to engage is high risk behavior (injecting drug through same needles, having unprotected sex, and having sex with multiple partners,) thereby increasing their vulnerability to HIV/AIDS (Michal-Johnson & Brown, 1992).

2.5.1.3 Substance abuse.

According to the National Institute on Drug Abuse (2011), substance abuse is an important risk factor in spreading HIV/AIDS infection among people in United States. It is evident from the literature that the use of alcohol and illicit drugs reduces the ability of a person to think about the consequences of high-risk behaviors, and that low-income people are more likely to engage in risky sexual behaviors (unplanned or unprotected sex). As a result, this population is more likely to contract an HIV infection (Substance Abuse and Mental Health Services Administration, 2003).

Couples residing in communities where the rate of drug addiction is high are at an elevated risk of contracting HIV/AIDS (CDC, 1999; Women Studies, 2005 p. 3). “Nearly 120,000 people die every year due to alcohol and drug abuse. Approximately 4.1 million women in United States use illicit drugs, and over 1.2 million misuse prescription drugs for non-medical reasons” (Women Studies, 2005). According to the CDC surveillance report (2008), “nearly one in five diagnoses of HIV/AIDS among women is related to injection drug use.” (CDC, 2008, p.2)

A meta-analysis examining the relationship between substance abuse and high-risk sexual behavior (which includes having multiple sexual partners, unprotected sex, sharing

needles) pointed out that substance abuse was associated with high-risk sexual behavior, and it further revealed that the use of alcohol, cocaine or other non-injected drugs would considerably increase the risk of HIV/AIDS (Leigh & Stall, 1993). Tortu et al. (2000) conducted a study to understand behavioral risk patterns among 2,945 women from the United States who were abusing drugs. They found that over 60% of the women abusing drugs were more likely to engage in high-risk sexual behavior (history of exchanging sex for money) which, in turn, may lead to contraction of HIV/AIDS (Tortu et al., 2000).

High-risk behavior, such as having multiple sex partners, unprotected intercourse, sex with high-risk partners (e.g., injection drug users, prostitutes), and the exchange of sex for money or drugs are very common among people abusing alcohol (Metzger, Navaline, & Woody, 1998; Stein et al., 2000; Windle, 1997). Alcohol use can lessen inhibitions and contribute to the sexual arousal of the person who is under the influence and this may lead them to practice high-risk sexual behaviors (Cooper, 2002; George et al., 2000; Dermen & Cooper, 2000). Although most research studies indicate that there is a positive correlation between drinking alcohol and exhibiting high-risk sexual behavior, alcohol might not be the direct cause of indulging in risky sexual behavior (Fromme, D'Amico, & Katz, 1999). People who abuse substances may be involved in high-risk behaviors because of their lifestyles and personalities (Avins et al., 1994; Justus, Finn, & Steinmetz, 2000; Stall et al., 2000). And high-risk behavior may increase their likelihood of contracting HIV/AIDS.

### 2.5.2 Protective Factors

Protective factors aid in preventing men and women from getting involved in high-risk behaviors (e.g. having multiple partners, having unprotected sex, substance abuse), thereby decreasing their likelihood of contracting HIV/AIDS infection. Research studies have identified high level of education, increased level of awareness about HIV/AIDS through public health education programs, being married or having a cohabiting partner, religiosity, promotion of condom use and social support as being protective factors against HIV/AIDS (Blake et al., 2003;

Brooks-Gunn, 2004; Browning, Leventhal, & Brooks-Gunn, 2004; Cubbin et al ., 2005; Hellerstedt et al., 2006; Wilder & Watt., 2002). However, for the purposes of this study, the researcher will specifically examine social support as a protective factor against HIV/AIDS.

Social support plays a very important role in the life of people living with HIV/AIDS. Research studies have indicated that women who have social support are less economically vulnerable than those without a social support system. Women who are emotionally connected to and receive instrumental support from friends, family and significant other are more likely to engage in safer sexual behaviors, and thus may decrease their likelihood of contracting an HIV infection (Walker, Wasserman, & Wellman, 1993; Wellman & Wortley, 1990).

People living with HIV infection face various physical, psychological, and social challenges in their lives. Social support plays an important role in helping these individuals and their families cope effectively with each stage of the infection (UNAIDS, 2000). According to UNAIDS (2000), if people living with HIV/AIDS have a high level of social support, they are more likely to cope easily with the stress related to the diagnosis. It is evident from the literature that some of the adverse consequences of getting diagnosed with HIV infection are the experiences of stigma, loss of housing, employment, income, and mobility (Kaiser, 2007; UNAIDS, 2006). During this stressful transition from one phase of one's life cycle to another, social support plays a key role in helping individuals and their families to better cope with the illness (UNAIDS, 2000). It helps victims to deal more effectively with the experience of stigma and thereby contributes toward an improved quality of life for the individuals infected with HIV/AIDS (UNAIDS, 2000). Having a high level of social support also helps individuals living with the HIV infection to make informed decisions regarding their health and will also encourage them to adhere to their treatment regimens (UNAIDS, 2000).

Many studies find that social support helps people living with the HIV/AIDS infection to cope with the disease and adhere to their treatment regimen (Blower, Schwartz, & Mills, 2003). A study conducted with 50 people (82% of whom were African American or Puerto Rican) living

with HIV/AIDS, recruited from an HIV/AIDS out-patient clinic in New York found that people who scored highly on a social support scale were more likely to adhere to their medication intake, whereas people who lacked social support were less likely to take medication for the treatment of their disease (Simoni et al., 2002). Another study (Edwards, 2006) with 33 African-American women aged 20 to 49 recruited from clinics in Baltimore, Maryland found that women who had social support were more likely to adhere to their medicine intake regimen. The authors found that social support motivated the participants to adhere to their treatment by saying "Just knowing that someone is there is a big relief. Just knowing that you don't have to be alone and isolated helps" (Edwards, 2006, p.689).

Haitcox (2009) conducted a study to examine the effect of social support among HIV/AIDS infected individual. Results of this qualitative research study, which was drawn from 13 semi-structured interviews, indicated that people having high levels of perceived social support were more likely to participate in HIV/AIDS coalitions, thus indicating that these persons were also interested in providing support to others living with HIV/AIDS (Haticox, 2009).

Studies clearly indicate the importance of social support for people living with HIV/AIDS. No studies known to the researcher have specifically examined how social support relates to the experience of violence among women living with HIV/ AIDS after they disclosed their HIV/AIDS status to their partners.

## 2.6 IPV and its relationship to HIV/AIDS

Some studies have examined the relationship between IPV and HIV infection. Some of these studies look at how IPV leads to increased risk of HIV/AIDS and some studies look at how HIV/AIDS leads to increased risk of IPV. Although the literature suggests that there appears to be an interactive effect between HIV/AIDS and IPV, in this study the researcher will examine how HIV/AIDS leads to IPV. The researcher will specifically focus on how a disclosure of women's HIV/AIDS status leads to IPV.

2.6.1 IPV leads to HIV/AIDS

Studies consistently find that women who are in physically and sexually abusive relationships are at an elevated risk of contracting HIV/AIDS infection and other sexually transmitted diseases [STDS] (Sareen et al., 2009; Teitelman et al., 2008; Weir et al., 2008; Wingwood, DiClemente, & Raj, 2000). For example, Wingwood et al.'s (2000) study of 203 battered women recruited from shelters in Alabama, found that 55% of the women who were both physically and sexually abused were three times more apprehensive about contracting HIV/AIDS than the women experiencing physical abuse alone (Wingwood et al., 2000). The sample consisted of 52.7% European Americans, 41.1% African Americans and 6.2 % of women belonging to other ethnic groups.

Sareen, Pagura and Grant's (2009) study with a nationally representative sample of women (N= 13,928) who were twenty years old or older, and who had been married or were involved in a dating or romantic relationship within the past year, found that women who had been abused by their intimate partners in the past year were three times more likely to have a diagnosis of HIV/AIDS. Teitelman, Ratcliffe, Dichter, and Sullivan (2008) examined the link between past and current abuse and HIV/AIDS risk among 2058 sexually-active women who were 18 years or older and involved in intimate relationships. Their results indicated that women with a history of past and current abuse (violent relationships) were twice as likely to contract HIV/AIDS as the women who had not been abused in the past (Teitelman et al., 2008).

2.6.2 HIV/AIDS leads to IPV.

Many studies find that women who have been diagnosed with HIV/AIDS are at high risk of experiencing IPV (Gielen et al., 2000a; Weir, Bard, & O'Brien, 2008; Williams, Wyatt, Myers, Green, & Warda, 2008). For example, Weir et al. (2008) conducted a study in Portland, Oregon, with 530 women who were 19 years old or older and were at risk for HIV/AIDS (injection drug use, crack use, intercourse with a male injection drug user (IDU), exchanging sex, or having had 10 or more sexual partners) and had a criminal record. This study examined the prevalence

and correlates of recent (within past three months) violence against women by their intimate partners and others (friends, drug-using partner, sex customer, relatives or strangers). Of the 530 women, 217 were the victims of some kind of violence and out of the 217 victims, 76% were abused by their intimate partners. More than 50% of the participants, who were physically and sexually abused by their intimate partners and others, suffered from health problems, including broken bones and other injuries that needed medical attention, low self-esteem, a high level of anxiety, depression, sexually transmitted diseases and HIV/AIDS infections (Weir et al., 2008).

Zierler et al. (2000) conducted a study using a nationally representative probability sample of 2864 HIV-infected adults who were enrolled in a HIV/AIDS Costs and Service Utilization Study and were also being treated for HIV/AIDS infection. The sample consisted of people living with HIV/AIDS and seeking medical treatment, who lived in both rural and urban areas. This study found that 50% of the participants diagnosed with HIV/AIDS experienced IPV due to their HIV/AIDS infection (Zierler et al., 2000). Participants in this study were asked two questions; "Since your HIV diagnosis, have you ever been physically hurt by your partner or someone important to you?" and (2) "Do you think it (being physically hurt) was related to or because of your HIV infection?" Zierler et al. (2000) did not specifically examine the effect of HIV/AIDS status disclosure on IPV.

In another study, Williams et al (2008) examined IPV among African-American women by administering structural interviews and comparing outcomes as baseline and follow-up at six months and twelve months. The researchers found that HIV-positive women were more likely to experience IPV at baseline, and at six months, in comparison to HIV-negative women. The study did not address if IPV was present before the women were diagnosed with HIV/AIDS. Also, the HIV-positive women were less educated, had lower incomes and had more symptoms of depression than the HIV-negative women in the study (Williams et al., 2008).

Gielen et al (2000a) conducted a study on 310 HIV-positive and 301-HIV negative women using the mixed method design (qualitative and quantitative). The aim of the study was to examine the role of the health-care provider on women's disclosure of HIV/AIDS status, women's concerns and experiences about disclosure, women's experiences of violence, and the relationship of violence to their diagnosis and disclosure. Participants were recruited from the urban clinic of a teaching hospital in Baltimore. Women who participated in the study were 18 years or older and 94 % of the participants were African Americans. Results indicated that 46.5% of the participants were offered help from the health-care provider to disclose their HIV/AIDS status to their intimate partner. Overall, 67% of the women had experienced IPV. Of the women who had experienced violence, 34 % experienced violence before their HIV/AIDS status had been determined, 16% experienced violence after the diagnosis, and 17% reported that they experienced violence both before and after the diagnosis. Also the study found that the women, whose partners were not infected, were twice as likely to experience IPV (Gielen et al., 2000a).

## 2.7 Disclosure of HIV/AIDS status and its relationship to IPV

A few studies have specifically examined how a partner's disclosure of HIV/AIDS status related to IPV. To examine the negative outcome of disclosing HIV/AIDS status, Gielen et al. (2000b) conducted a study at a primary health care clinic and community center. The participants were 257 HIV-positive women, between 18 and 44, who completed a face-to-face interview. 92% of them were African-American, 54% of them had less than 12 years of education, 56% were intravenous drug users, and 30% knew they were HIV positive for more than five years (Gielen et al., 2000b). This study revealed that 62% of the respondents had been physically and sexually abused by their partners and significant others (which included friends, relatives, neighbors) both before and after the disclosure of HIV status and 44% had experienced negative experiences after the disclosure of their HIV/AIDS status (Gielen et al, 2000). This study focused only on the experience of IPV through the process of disclosure, so it

was an important source of information on the impact of HIV disclosure. However, the disclosure was not adequately measured since the women were asked only the broad question of how many people they disclosed their HIV/AIDS status to. No questions were asked to assess who they disclosed their HIV/AIDS status to. Also, the authors do not address the severity and frequency of the violence following the disclosure of HIV/AIDS status.

In an earlier study, Rothenberg, Paskey, Reuland, Zimmerman, and North (1995) also studied the consequences of disclosing HIV/AIDS status to the client's partner. The participants in this study were 136 health-care providers who had at least six years of experience in treating people living with HIV/AIDS (Rothenberg et al., 1995). The researchers found that that 24% of health care providers reported that they had clients who had experienced physical violence following disclosure of HIV/AIDS infection to an intimate partner, 38% of the clients experienced emotional abuse, and 37% were abandoned by their families. Although this research found that the IPV occurs after the disclosure of HIV/AIDS status, it did not examine the frequency and severity of IPV before and after the partner's notification.

The work of Gielen and others (Weir et al, 2008; Zierler et al, 2000) provides theoretical and methodological insights for this study. Gielen (2000) uses the theoretical concept of vulnerability to explain the increase in IPV after disclosure of HIV/AIDS status. She also contends that, even when the HIV/AIDS infection is disclosed voluntarily, disclosure can result in IPV. She further argues that those who are HIV/AIDS infected are already vulnerable to exclusion from opportunities for social and economic mobility and well-being and are thus extremely vulnerable to IPV. IPV is also strongly associated with lack of power and feelings of vulnerability. And by being infected with HIV/AIDS infection, women may feel even less powerful than men, both physically and mentally, and this could considerably increase their vulnerability to IPV. My study will also look at changes in IPV following disclosure of HIV/AIDS infection, with a focus on the social support that may reduce women's vulnerability and prevent them from being excluded from opportunities for social and economic mobility and well-being. At the

methodological level, Gielen's (2000) study did not attempt to focus on the changes in frequency and severity before and after disclosure of HIV/AIDS status but she stressed the importance of obtaining data on severity of IPV under conditions of vulnerability. This study obtained data on the severity of IPV, in addition to the frequency of IPV and the type of IPV.

The evidence from the various research studies discussed above suggests that disclosure of HIV/AIDS status increases the IPV experience among women. These studies focus on the voluntary disclosure of HIV/AIDS infection to a partner. However, none of the research studies examined how disclosure of women's HIV/AIDS status to her partner, whether through voluntary disclosure or health personnel or some other means, relates to the frequency, type and severity of IPV. More knowledge about the type of IPV, and the frequency and severity of IPV among HIV/AIDS infected women who disclosed their HIV/AIDS status to their partner, will likely help in developing programs and interventions to prevent the occurrence of IPV.

## 2.8 Limitations of the Research Studies

There is extensive research on both HIV/AIDS and IPV. There are also a number of research studies which have focused on showing the influence of HIV/AIDS on IPV and on how IPV influences HIV/AIDS. However, there are a limited number of studies that focus on how disclosure of HIV/AIDS status leads to IPV. This study will attempt to address some of the limitations of previous studies. One of the limitations of the research articles reviewed is that multiple analyses were conducted using the same sample of women. The researchers might have done that because there is limited access to this special population of people living with HIV/AIDS. Three studies (Gielen et al, 2000; 2005; McDonnell et al, 2003) used the same data collected from the participants in Project Wave, (Women and the Violence Epidemic). Further, there is a possibility that the same samples were recruited for different studies, such as the women from the HIV/AIDS clinic in Alabama (Lichtenstein, 2005; 2006). The HIV/AIDS clinic in Alabama provides services to 1200 people living with HIV/AIDS and, of these, 50 women

participated in the focus group for the above mentioned studies. This poses the threat of multiple treatment interference. And in order to address this issue the researcher will conduct this study in an agency in which no similar research studies have been done in the past.

Several studies (Gielen et al, 2000a; McDonnell et al, 2003; Williams et al 2008; Zierler et al, 2000) examining the relationship between HIV/AIDS and IPV have used convenience samples of women from shelters and clinics (Gielen et al, 2000; McDonnell et al, 2003; Rothenberg et al, 1995; Williams et al, 2008) limiting the generalizabilty of the study findings. However, my study cannot address this issue. Like prior studies, the researcher will use a convenience sampling. Because there are small numbers of clinics working with people living with the HIV/AIDS infection, it is not feasible to obtain a large representative sample. Another reason for choosing convenience sampling is the sensitive nature of the questions being asked. Convenience sampling will only include those who are willing to answer questions about the sensitive topics of both HIV/AIDS and IPV.

Another limitation of many of the research studies (McDonnell et al, 2003; Sareen et al, 2009; Tortu et al, 2000; Weir et al, 2008; Zierler et al, 2000) is that they use self-reported data. As Rubin & Babbie (2008) assert, the response in self-reported data may vary from individual to individual. Therefore, there is a threat to the validity of the study, because the risk of social-desirability bias increases (Rubbin & Babbie, 2008). Most of the studies done in the past (Gielen, 2000; Zierler et al, 2000) collected the information on the experience of abuse by asking dichotomous questions, which made it difficult for the researchers to measure the intensity of the problem. My study will also use a self-reported survey. However, since the standardized instrument will be given out to the client, the researcher will be able to measure the intensity of the IPV.

Measurement issues across the studies are also a concern. Four of the studies (Coker et al, 2000; Gielen et al, 2000a; Rothenberg et al, 1995; Wingood et al, 2000) address different types of abuse (physical, sexual and psychological) separately, whereas other studies

combined them and two studies (Weir et al, 2008; Wu et al, 2003) defined “recent” abuse as occurring within the past three and six months while others considered “recent” as abuse occurring during the past year (Sareen et al, 2009; Teitelman et al, 2008; William et al, 2008 ). These issues make comparison across studies difficult. In order to overcome these problems, valid and reliable measures need to be used. My study will use the standardized measure, which is valid and reliable, and the definition of “recent abuse” will be the experience of abuse in the past twelve months (Straus et al., 1996).

Studies examining the association between IPV and HIV/AIDS use a cross-section survey design or longitudinal study design (Beadnell et al, 2000; Sareen et al, 2009; Teitelman et al, 2008; Weir et al, 2008). The number of longitudinal studies is far fewer than cross-sectional studies. The researcher found only two longitudinal studies (Fals-Stewart, 2003; William et al, 2008) that have addressed IPV among the women at risk for or living with HIV/AIDS. In a longitudinal study, subjects serve as their own control. There is a possibility of a high rate of attrition (Rubbin & Babbie, 2008) but in-depth information about the intensity of the problem can be examined, since the researcher gets an opportunity to analyze the data over time, and the change in the perpetration and experience of violence can be measured. While there is a great need for more longitudinal studies to be done in this area, the constraints of time and budget dictate that this study will use a cross-sectional study design.

# CHAPTER 3

## THEORETICAL FRAMEWORK

The purpose of this study is to examine how disclosure of a woman's HIV/AIDS status relates to the frequency and severity of physical, sexual and emotional IPV she experiences, and to examine how social support and partner's HIV/AIDS status affects the frequency and severity of IPV she experiences. This chapter will discuss the two theoretical frameworks, feminist theory and social capital theory that will guide this research study.

Feminist theory offers a well established set of propositions that include the roles of gender, power and perceived vulnerabilities in explaining several social problems such as poverty, poor health among women, and IPV. In particular, the theory is well suited to help understand the causes and the consequences of IPV. Feminist theory also helps in understanding the women's vulnerability to IPV as a result of the disclosure of their HIV/AIDS status. It can help us to identify, how partner's HIV/AIDS status relates to the relative power dynamics that can exist in a relationship and result in IPV.

Gender and power play a key role in the analysis of IPV. Women disproportionately are victims of IPV and the unequal distribution of power between men and women greatly influence the dynamics of IPV (Herzog, 2007; Hunnicut, 2009). The two concepts of gender and power distribution between genders are fundamental to feminist theory.

Social capital theory will also be used to guide this study. Social support, as a variable has for long been a central concept of social capital theories; Social support is also an important variable related to IPV. Literature clearly suggests that, having social support from friends and family considerably enhances individual's personal and emotional skills to deal with current difficult situations and to handle similar situations in future (Cohen & McKay, 1984). In the following sections, theories, the feminist as well as the social capital theories are discussed.

## 3.1 Feminist Theory

Feminist theory is an outgrowth of the feminist movement. Feminism as a movement was initiated to ensure the social, political, and economic equality of the women (Drucilla, 1998). The objective of the feminism was to bring about the gender equality by eliminating oppression of women. Feminism as a social movement has focused on the empowerment of women by advocating for legal reforms and policies to fight against oppression (Freedman, 2001) including rights related to property, voting, abortion, and reproductive justice. The feminist movement has also long confronted the patriarchal system and the structures that maintain it. It has confronted the many structures that maintain the unequal distribution of power between men and women (Drucilla, 1998; Echols, 1989), including the political, economic and educational structures. The feminist movement has advocated for legal reforms addressing gender discrimination in the work place, family and education.

Feminist advocates played an active and important role in the battered women movement (Schechter, 1982). The feminist movement advocated for greater legal protection of women from being physically, sexually and emotionally abused by their partners (Drucilla, 1998; Echols, 1989) and they successfully established rape crisis and battered women shelters throughout the United States (Schechter, 1982). These shelters try to empower women who have been abused and provide them with services to address their needs. In addition to advocating for changes in the legal system to safeguard women, feminists assessed the dynamics of violence differently from other social science researchers by asserting the central roles of power and gender inequality contributing to women's vulnerability to IPV. They examined the social and political factors which led to power differential for men and women. They explored how social factors influence men perpetrating violence against women (Connell, 1987). Feminists fought against the notion that violence against women is only the matter of the family and instead argued that violence against women is also a critical social and political issue.

The main aim of the feminist theory is to promote women's rights and interests by understanding, gender inequality, which is considered the root cause for unequal treatment of women in the society (Chodorow, 1989; Gilligan, 1977). Feminist theory is often divided into many different categories focusing on specific aspects of women's inequality in society. Most commonly, feminist theory is discussed in terms of liberalism, radicalism and socialism (Sauliner, 1996). Liberal feminist believes that, woman's equality can be attained through the regulation of legal and social measures (Callahan, 1993). Liberal feminists actively support equal right of men and women in society. Radical feminist holds the patriarchy accountable for the oppression of women and advocates for bringing about cultural rather than political change to undermine patriarchal social system. Socialist feminists assert that oppression of women is the result of the overlapping relationship between capitalist system and patriarchal system (Callahan, 1993). For example, although both socialist and radical feminists supported the ratification of the Equal Rights Amendment (ERA) introduced in 1972, they based their support on different bases. Radical feminists supported the ERA to achieve their long term objective of dismantling the institution of patriarchy. Socialist feminists supported the amendment in order to gain entry into political institutions and bodies of government while simultaneously advocating for the reform of capitalist institutions with the objective of weakening power differential between men and women (Petchesky, 1979). The liberal feminists however, supported the amendment for improving women's participation in all realms of society including the political structures. The liberal feminists unlike the socialists and radical feminists do not perceive capitalists institutions as barriers to women's participation in the economy and government (Flexner, 1996). However, fundamental to all feminist theory is the belief that males have greater power than females resulting in the exploitation of women. This basic belief is used as a theoretical framework which guides this study.

Recognition of the patriarchy is an important aspect of feminist theory. Patriarchy has been defined as "rule by the male head of a social unit" in which the "patriarch, typically a

societal elder, has legitimate power over others in the social unit, including other (especially younger) men, all women and children" (Pilcher & Whelehan, 2004, p. 93). Also, patriarchy promotes and maintains the oppression of women in society as normative (Pilcher et al., 2004).

## 3.2 Feminist theory and IPV

Feminist theory explains violence, especially IPV, through the concept of the patriarchal society with a focus on power differences for men and women (Pilcher et al., 2004).

Feminist theory suggests that IPV emanates "from a patriarchal society which promotes women's subordinate status in society" (Ruiz-Perez, Mata-Pariente, & Plazaola-Castano, 2006).

Men's use of power over women in an abusive relationship is promoted by the sense of supremacy instilled in men through the patriarchal society (Dobash & Dobash, 1979; Yick, 2001). Patriarchal societies socialize men and women to experience and exert power in dissimilar ways. Men are socialized to be aggressive in order to exert power and execute their supremacy over women. This promotes gender inequalities, which ultimately leads to IPV, resulting in men expecting more privileges than women, treating women unequally by suppressing them, and ultimately controlling them through their physical strength and domination (Pence & Paymar, 1993; Schechter, 1982).

Feminist activists advocating against IPV suggests that both rigid gender roles and the acceptance of violence due to the traditional societal norms are the powerful indicators of IPV in a relationship. This is consistent with the views of Danis (2003), who asserts that IPV is not a psychological problem, rather it is a structural problem. Feminist theorists assert that variations in the distribution of IPV across social groups stem from the presence of patriarchal social structures which promote oppression of women socially, politically, legally, and economically (Dobash & Dobash, 1979). In general, feminist theorists argue that, by relegating women to lower social status and power, patriarchal societies perpetuate women's vulnerability to abuse, dominance and exploitation. At lower levels of power, women have fewer assets at their

disposal and poorer access to resources than men (Drucilla, 1998; Echols, 1989) resulting in high levels of vulnerability to physical and emotional abuse.

Feminist theorists argue that society instills the feeling of supremacy in men, by devaluing the roles of women both domestically and in public realms. Men are accorded dominance and power through existing gender values and norms (Echols & Willis, 1990). For example, societal values and norms suggest that it is more important for men to earn high wages than for women. This value has led to discriminatory practices and prejudices against women in the workforce and accounts for the current gender wage gap in the labor market (Council of Economic Advisers, 1998).

In addition to traditional patriarchal power, other factors such as socio-economic status, household income, social norms, religious beliefs, and educational level can exert pressure on women to stay in an abusive relationship and thereby increase their vulnerability to IPV (Spring, 2008). If women are economically and emotionally dependent on their male partners, the fear of losing these supports can compel women to stay in an abusive relationship (Spring, 2008). These factors reinforce the dominance and oppression in a relationship, and thereby increase women's vulnerability to IPV.

### 3.3 Women's Disclosure of HIV Status, IPV and Feminist Theory

Although IPV and HIV/AIDS are common among both males and females, women are disproportionately affected by these two social problems (CDC, 2007; 2006). "Women's subordinate status in society" (Ruiz-Perez et al., 2006, p. 51) and the unequal distribution of power between intimate partners helps explain the relationship between those diagnosed with HIV/AIDS and IPV (Thibaut & Kelly, 1959). Power plays an important role in a relationship and feminist theorists argue that the patriarchal society views men's aggression over women as a way to exhibit their supremacy over women (Bograd, 1988; Dobash & Dobash, 1979).

In general, men's domination of women is likely to increase the likelihood of vulnerability in almost all aspects of life (health, social, and psychological) because of the higher

status of men in the patriarchal society. When the extent and intensity of vulnerabilities such as women's economic dependencies and HIV/AIDS infection increase, women are more likely to be victimized by their intimate partner. Men's dominating disposition increases women's vulnerability within relationships (Dobash et al., 1979). Being a woman and having HIV/AIDS increases one's vulnerability in general to various physical and mental health issues and the very fact that the women are infected with HIV/AIDS increases their risk of being abused.

Feminist theory also suggests that when men perceive various vulnerabilities in their partners, they are more likely to engage in IPV especially when they perceive themselves as more vulnerable (Yick, 2000). For example, Smith (2008) found that the majority of men participating in his research study identified their financial insecurities as the main cause of perpetration of violence. Often times when women are empowered, their male partner feels that their roles as the head of the family are threatened, and in order to execute their masculine identity, men perpetrate violence (Smith, 2008). Such values encourage men to perpetrate violence against their intimate partners, in order to execute control. In a patriarchal society, men play the role of the head of the family, because they may have more education than their wives, are economically independent and are the sole bread winner of the family. When this role as head of the family is threatened due to the lack of resources, men will perpetrate violence to maintain and restore their sense of supremacy and power over women (Allen & Straus, 1980; Gelles & Corell, 1990; Goode, 1971).

In particular, when men are not HIV infected, they are more likely to perpetrate violence against their intimate partner who is HIV infected. Partners' knowledge of women's HIV positive status in general increases the assessment of women's vulnerability. Research studies (Rothenberg et al., 1995; Weir et al., 2008; Zierler et al., 2000) suggest that women's disclosure of HIV/AIDS status lead to the experience of violence. This may be due to the fact that, as men perceive women to be more and more vulnerable, they are more likely to perpetrate violence against their intimate partner. However, when men themselves are infected with HIV/AIDS,

disclosure of women's HIV/AIDS status may not increase men's assessment of woman's vulnerabilities relative to their own. When men are not infected, partner's HIV/AIDS status may elicit IPV because of the threat to ownership of his partner due to suspicions of infidelity. As a result, this researcher suggests that there may not be an increase in the experience of IPV. On the other hand if men are HIV positive and have disclosed their HIV/AIDS status to their partners, then they are more like to perceive themselves as equally vulnerable as women. As a result they may not execute control over women, thus, decreasing a woman's vulnerability to IPV.

## 3.4 Social Capital Theory

The concept of social capital was first developed by Pierre Bourdieu, a French sociologist, anthropologist, and philosopher in the 1970s. He defined social capital as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (Bourdieu , 1986 p. 248). The concept of social capital was supported by Lyda Judson Hanifan's (Hanifan 1916, 1920), who asserted that society is composed of social entity, which is based on support, amity, compassion and social interaction. Jane Jacob (1961), James S. Coleman (1988) and Robert D. Putnam (1993; 2000) were some of the theorists who contributed in highlighting the importance of social capital in social work and sociological studies.

Various theorists have defined social capital in different ways. For example, Cohen and Prusak (2001) believe that "social capital consists of the stock of active connections among people: the trust, mutual understanding, and shared values and behaviors that bind the members of human networks and communities and make cooperative action possible" (p. 4). Putnam (2000) considers that "social capital refers to connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them." (p. 19). Putnam (2000) asserts that social capital is important for the welfare of individuals in the community due to the following reason:

(1) “social capital allows citizens to resolve collective problems more easily; (2) social capital “greases the wheels” that allow communities to advance smoothly; and (3) social capital is widening our awareness of the many ways in which our fates are linked” (pp. 288-90).

Social Capital theory is very broad in nature and can be conceptualized as extensively as anything encompassing social relation. Human capital, family social capital, personal capital, emotional capital, community social capital, economic social capital, political capital, and cultural capital are some of the terms used in the literature to describe social capital. Social Capital is a multifaceted pragmatic theory which can be understood in many different ways. Therefore, it is necessary that a researcher determine what aspect of social capital will be examined (Harpham, Grant, & Thomas, 2002).

In order to narrow down the broad concept of social capital, it has been classified into various categories such as structural social capital and cognitive social capital. Social structural capital promotes the joint approach of the group to support the individual through networks, roles, policy, actions and models (Krishna & Uphoff, 1999). Cognitive social capital provides support to individuals through shared beliefs, values, attitude and norms (Krishna et al., 1999). According to Putnam (2000) social capital can be classified into informal social capital and formal social capital. Informal social capital is the way in which the individuals communicate and establishes the relationship with each other and formal social capital is the amount of time and effort that individuals invest in community activities (Putnam, 2000). Bonding social capital and bridging social capital are other two classification of social capital (Onyx & Bullen, 2000). Bonding social capital is the type of support usually found among individual in rural communities wherein strong mutual support is found among community members both as well as among group members and community leaders. Bridging social capital is more common among the people from the urban communities wherein the group members easily accepts each other and are more tolerant toward the outsiders (Onyx et al., 2000).

## 3.5 Social Capital and IPV

Social capital theorists argue that social capital helps in restoring the psychological and biological wellbeing of an individual (Coleman, 1988; Putman, 2000). This is critical for the many women who are diagnosed with HIV/AIDS every year. Putman (2000) also pointed out that individuals experiencing trauma are more likely to handle the situation better, if they have high levels of social capital. Social support not only provides psychological resources to individuals, but will also help them in overcoming emotional hurdles (Cohen & McKay, 1984). People having high level of social support will sustain their skills of handling difficult situation into the future (Cohen & McKay, 1984). Research also indicates that women with high level of social support are less likely to experience violence (Coker et al., 2003).

Another study was conducted to examine the role of social support in reducing the negative impact of IPV (Coker et al., 2003b). The sample of the study was 191 women experiencing IPV. Results indicated that women who scored high on emotional support were more likely to have better physical and mental health as oppose to those who had lower level of emotional support (Coker et al., 2003b). Thus women with high level of social support are less likely to experience adverse consequences of IPV.

## 3.6 Feminist Theory and Social Capital Theory

Feminist theory supports the use of social capital theory in assessing women's experiences with IPV. Feminist theories view social support from others, women in particular, as an important and useful protective resource for women and it is particularly an important resources against IPV (Davis et al., 2001). Social support is the "belief that one is cared for and loved, esteemed and valued, and belongs to a network of communication and mutual obligations" (Cobb, 1976). As social support and the availability of various kinds of resources from members of social networks women belong to increases, women are less likely to be viewed as isolated targets for violence in a relationship (Davis, Taylor, & Furniss, 2001) and less likely to experience violence (Baumgartner, 1993; Cooney, 1998). Research studies on IPV

consistently find that perpetrators try to remove women from their social support systems. Perpetrators isolate their intimate partners from their friends and relatives to gain control over the relationship (Eisikovitis, 1996). The prevalence of IPV is more likely to be higher among couples who are independent and isolated from their friends and family (Cooney, 1998).

## 3.7 Additional Factors

There are other factors such as income, marital status, education and race/ethnicity which affect the relationship between disclosure of women's HIV/AIDS status and IPV. Given the focus of this dissertation, on three selected independent variables; disclosure of women's HIV/AIDS status, partner's HIV/AIDS status, and social support, other factors such as income known to influence IPV will be controlled. Research studies on IPV among the HIV/AIDS infected women usually use factors such as marital status and income as controls (Gielen et al., 2000; Rothenberg et al., 1995; Weir et al., 2008; Zierler et al., 2000).

### 3.7.1 Income

Feminist theory suggests that access to and availability of resources influences the likelihood of IPV. Women belonging to low socio-economic status are disproportionately affected by both IPV and HIV/AIDS (CDC, 2005; Jewkes, 2002; Coker, 2007; Benson et al., 2004; Cunradi et.al., 2002; Collier et al., 2003). Men perpetrate IPV, due to the fact that, women are economically dependent and feminist believes that men perpetrate violence due to the institutionally sanctioned power which allows them to economically, physically, sexually, and emotionally dominate their intimate partner (Pence & Dasgupta, 2006).

Moreno et al. (2002) found that poverty is an important risk factor for perpetrating violence against women. The stress associated with poverty increases the women's risk of experiencing abuse. Straus and his colleagues assert that the economic dependence on men is the main factor contributing towards the high rates of IPV (Straus, Gelles, & Steinmetz, 2006). This supports the feminist perspective that women are oppressed due to the institutionalized

disparity which is influenced by factors like income, age, gender, and race which leads to the occurrence of violence in a relationship (Gil, 1985).

3.7.2 Marital status.

Another factor which plays an important role in assessing the women's experience with IPV is their marital status. Feminist approach suggests that cohabiting men are more likely to be violent than married men, because they tend to adhere to patriarchal ideology (Ellis, 1989). Research studies have consistently indicated that the rate of violence is higher among cohabiting couples then married couples (Kenney and McLanahan, 2006; Laub & Sampson, 2001; Sampson et al., 2006).

Lenton (1995) explained how feminist theory, marital status and violence are correlated to each other. He asserted that men who are in cohabiting relationship are more likely to perpetrate violence against their intimate partner due to lack of sense of unions, ownership, power and control which the marriage license might provide to married man and hence men who are in marital relationship are less like to perpetrate violence, since they have this feeling of ownership (Lenton, 1995).

Feminist theory argues that men in general have more power than women, due to the patriarchal societal norm (Pilcher & Whelehan, 2004; Ruiz-Perez, Mata-Pariente, & Plazaola-Castano, 2006). The differential power relationship between men and women becomes institutionalized through marriage. Women and men accept the power differential institutionalized in society. However, research studies find that the prevalence of violence is higher among the couples who adhere to the power differential relationship in the marriage and do not maintain egalitarian relationships whereas if couples maintains an egalitarian relationship and reject the gendered power differentials then there is less likelihood of experiencing IPV (Black, 1990; Cooney, 1998).

### 3.7.3 Education

Feminist theory suggests that women who have higher levels of educations are more likely to be empowered and knowledgeable about protecting themselves and safeguarding their physical security than women with less education (Hornung, McCullough & Sigimoto, 1981). Research studies in the past have indicated that women whose educational attainment is higher than that of her partner are more likely to experience IPV (Hornung et al., 1981). MacMillan and Gartner (1999) found that men who were unemployed were more likely to perpetrate violence against a partner who was working. Women who are empowered are less likely to experience violence (Krishnan, 2005). Thus, a woman's high level of education can also serve as a protective factor. As a woman's ability to critically assess her environment increases, she is more likely to make decisions that will protect her from bodily harm and preserve her integrity. Educated women have more options in life and greater ability to support themselves and thus are more likely to leave an abusive relationship. Thus, husbands may have more value and respect for his educated partner (Diop-Sidibe, 2001; Hoffman, Demo, & Edwards, 1994).

### 3.7.4 Ethnicity

Cultural values that support men's domination over women encourages IPV. Feminist literature suggests that level of IPV may vary across social groups depending upon the extent of sub-cultural support for violence (Collins, 1991; Crenshaw, 1994; Zinn & Dill, 1996). Though the level of IPV experienced may vary due to other variables such as income and education, it is likely that there is small but significant proportion of women experiencing IPV because of their ethnic cultural socialization into domesticity (Collins, 1991; Crenshaw, 1994; Zinn & Dill, 1996). Feminist researchers argue that gender, minority group, and social class are closely interrelated. Benson et al. (2000) asserts that African American and Hispanics are highly affected by poverty and this elevates their vulnerability to violence (Benson, Fox, Demaris, & Van Wyk, 2000; Crenshaw, 1994). Although IPV is common among women belonging to all racial or ethnic backgrounds (West, 1998), but both African American and Hispanic women

have a unique history in this country as social groups that have experienced discrimination and prejudice, which may contribute to their feeling of powerlessness and this in turn may increase their vulnerability to IPV (Collins, 1991; Crenshaw, 1994; West, 1998).

Women from some minority group are raised with patriarchal social values which affect their perception and tolerance of IPV (Benson et al., 2000). They may be brought up with the notion that men are superior to them and they need to sacrifice and make compromises in order to maintain their marital relationships. These stereotypes reinforce womens' oppression in the society and increase their vulnerability to IPV (Collins, 1991; Crenshaw, 1994; Zinn & Dill, 1996).

### 3.8 A Theoretical Model of Intimate Partner Violence (IPV) for Women with HIV/AIDS.

The proposed model examines the direct effects of three variables, women's disclosure of HIV/AIDS status, partner's HIV/AIDS status and social support on frequency/severity of physical sexual and emotional IPV. Establishing the significance of the direct effects of the partner's HIV/AIDS status and social support on IPV is necessary to investigate their consequences such as mediating or interactional effect on IPV. This study attempts to empirically assess the presence of the direct effects.

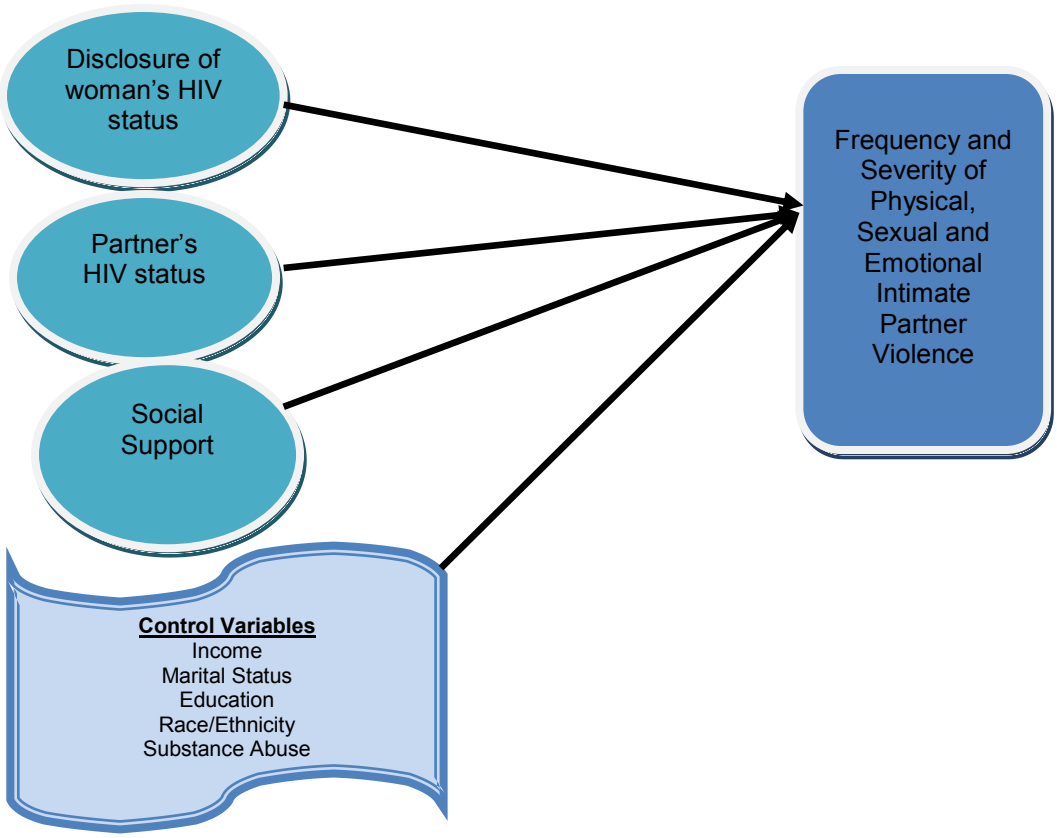



Figure 1: A Theoretical Model of Intimate Partner Violence (IPV) for Women with HIV/AIDS.

# CHAPTER 4

# RESEARCH DESIGN AND METHODS

In this chapter, the design and methodology of the study will be explained. First, the research questions and hypotheses of the study will be stated and independent and the dependent variables will be operationalized. Next, the study's settings, sample size determination, sampling technique, procedures for recruiting the sample and the instruments to be used in the study will be discussed. The validity and reliability of the measures will be discussed. Lastly, the statistical approach will be described.

The present study used a survey design and a non-probability purposive sampling. Use of purposive sampling methods enabled the researcher to access the specific targeted population of those women who have been diagnosed with HIV/AIDS who were not otherwise readily and publicly identifiable and accessible. The participants in this research were women living with HIV/AIDS who received services from HIV/AIDS Outreach Center in Fort Worth Texas. The inclusion criteria required the participants to be a woman infected with HIV/AIDS, aged 18 years or older, and having a partner identified as being intimate.

## 4.1 Research Questions

This study was guided by the following research question:-

1. How does a disclosure of women's HIV/AIDS infection influence the frequency and severity of physical, sexual and emotional violence she experiences?
2. How do levels of social support influence the frequency and severity of physical, sexual and emotional IPV among women who are HIV/AIDS infected.
3. How does a partner's HIV positive status influence the frequency and severity of physical, sexual and emotional violence women experiences?

## 4.2 Hypothesis

1. Disclosure of women's HIV/AIDS status increases the frequency and severity of physical, sexual and emotional IPV that she experiences.

Rationale: This hypothesis is based on feminist theory that suggests that women's lack of power relative to that of a man increases her vulnerability to physical, social and emotional abuse. HIV/AIDS infection is perceived as major barrier to one's capabilities to function due to the associated physical and mental health consequences. The disclosure of HIV/AIDS status is likely to increase IPV due to the fact that the partners of women who are not HIV/AIDS infected may try to exert greater power and control over them due to her vulnerability and lack of power. In addition, from a feminist perspective, if a man perceives his partner contracted HIV/AIDS through another relationship, his lack of control over his partner' body and her sexuality, is likely to result in IPV.

2. The greater the level of social support of women with HIV/AIDS infection has, the lower the frequency and severity of physical, sexual and emotional IPV that she will experience.

Rationale: This hypothesis is based on social capital theory that suggests that as women's access to social support increases, they are less likely to be isolated and vulnerable. They will have greater power in relationships. Presence of social support is likely to encourage women to exercise their rights as individuals and access social resources to protect herself. High levels of social support may result in decreasing women's vulnerability to abuse.

3. Women whose partner's are not infected with HIV/AIDS are more likely to experience higher frequency and severity of physical, sexual and emotional IPV compared to those whose partners' are HIV/AIDS infected.

Rationale: This hypothesis is based on feminist theory that suggests that patriarchal sources of power and control play a major role in most acts of abuse and dominance over women. Men without HIV/AIDS are more likely to perceive their own partners with HIV/AIDS as being limited

in their ability to assert power and protect themselves from abuse. The perceived gap in power between the intimate partners is likely to increases men's ability to engage in IPV. Furthermore, men's perception of infidelity as a source of women's HIV/AIDS infection is likely to result in IPV.

## 4.3 Operationalization of variables

### 4.3.1 Dependent variable: IPV

The dependent variable for this research was IPV experienced by women living with HIV/AIDS. IPV was operationalized as the frequency and severity of physical, sexual and emotional violence experienced by women living with HIV/AIDS. As described in the measurement section, CTS-2 (1996) survey measured the frequency of physical, sexual and emotional violence experienced by women living with HIV/AIDS in the past year. Also the severity of the violence experienced by women in the past year was measured by the consequence subscale, of CTS-2 (1996). The experience of violence among women was measured by examining the frequency and the level of severity of physical, sexual, and emotional violence experienced by women both before and after her HIV/AIDS diagnosis.

### 4.3.2 Independent variables

#### 4.3.2.1 Disclosure of women HIV/AIDS status

Respondents were asked how the respondent contracted HIV/AIDS and when did they disclose their HIV/AIDS status to the partner.

#### 4.3.2.2 Partner's HIV/AIDS status

Respondents completed the questions on their partners' HIV/AIDS status. This included the information about the partner's diagnosis and risky sexual behaviors.

#### 4.3.2.3 Social support

Social support was operationalized as an amount of perceived social support received from friends, family and significant others. Respondents were asked to assess

their perceived level of social support on the seven point likert scale ranging from strongly disagree to strongly agree (Zimet et al., 1988).

4.4.3 Control variables

4.4.3.1 Income

Income was measured by asking the respondents about their total income and their partners' total monthly income for the past twelve months. Respondents were asked to choose the level of income from the seven categories listed.

4.4.3.2 Race/ethnicity

Respondents were asked to choose their ethnicity by selecting from the list of categories provided.

4.4.3.3 Education.

Respondent were asked to choose the highest level of education attained from the categories listed.

4.4.3.4 Substance abuse

Participants were asked tocomplete the CAGEAID questionnaire (It is a four item scale developed by Brown and Round in 1995. This scale was used to determine whether the respondent had a substance abuse issue in her life or not.

4.4.3.5 Marital Status

Respondents were asked to respond whether they are married, divorced, separated, cohabiting, widowed or single (never married).

## 4.5 Setting

Data was collected from the AIDS Outreach Center of Fort Worth, located in the DFW metroplex, working for people living with HIV/AIDS. AIDS outreach center is located in Fort Worth, Texas, and is one of the leading organization in Tarrant and seven surrounding rural

counties serving the people living with HIV/AIDS infection. The mission of the agency is to educate the public about HIV/AIDS prevention and to advocate for the HIV/AIDS policy. AIDS Outreach Center (AOC) is community-based organization founded in 1986 as the Fort Worth Counseling Center. The agency was founded by Tarrant County's gay and lesbian community to help provide mental health and legal support for those suffering from HIV/AIDS. AOC is one of the highly used non-medical referral destination for people living with HIV/AIDS infection. Annually, it serves approximately 1,900 people living with HIV/AIDS in Tarrant County and surrounding areas (retrieved on 06/05/10 from http://www.aoc.org/about.asp).

Services provided by AOC are mental health counseling, support groups, the Sandy Lanier Nutrition Center and nutritional counseling, the Geisel-Morris Dental Clinic, youth services, minority outreach, case management, legal assistance, transportation, housing, emergency assistance, insurance continuation program, information line, community education and prevention services, including confidential and anonymous testing for HIV/AIDS and Syphilis, HIV negative and HIV positive prevention programs (retrieved on 06/05/10 from http://www.aoc.org/services.asp).

### 4.6 Sample size

The researcher recruited 64 women living with HIV/AIDS. The sample size was determined by using Statistical Power analysis. Statistical Power is “the ability of a statistical test to detect a false null” (Rosenthal, 2001, p. 304). Cohen (1992) asserts that there are five important factors which need to be taken into consideration in order to perform the Statistical Power Analysis. Sample size determination using power analysis is now widely accepted as a reliable method to reduce several types of problems which bias the estimates of the effects of independent variables on outcomes (Milton, 1986).

It is important to pre-determine the value of significance level, the effect size, preferred power and the estimated variance to calculate the sample size (Cohen, 1992). This study used significance level of .05 for all statistical tests. There are three standardized effect size namely

small, medium and large depending on the type of statistical analysis that will be used for the study (Cohen, 1992), the medium value of effect size was used for the purpose of this study. Since this study used multiple regression analysis the medium effect size value ($f^2 = .15$) was used as Cohen stated that for the purpose of regression analysis, medium effect size is an appropriate choice. The value of medium effect size was used because Cohen emphasized that a medium effect size may indicate an effect that would probably be "visible to the naked eye of a careful observer" (Cohen, 1992, p156). The statistical power of .80 was be used as Cohen (1992) and Rosenthal (2001) specified it as appropriate value for studies using regression analysis. Using Milton's (1986) statistical equation, a sample size of 64 was needed to find a medium effect size.

Sample size was determined by using the following equation for statistical power analysis which was suggested by Milton to calculate sample size for studies using multiple regressions:

$$n = k + 1 + \frac{t^2 (1 - R^2)}{\Delta rj2}$$

Before conducting the research, formal written approval was obtained from the AIDS Outreach Center. The researcher met Ms. Shawna Stewart, Director of the Mental Health Services for AIDS Outreach Center of Fort Worth to discuss the research project and the possibility of conducting the study in the agency. The agency gave the approval to conduct the research study (See Appendix B). The researcher received a formal letter of support from the agency stating that the researcher has been allowed to conduct the research in the agency. The research proposal and its formal letters of support were submitted to the Institutional Review Board (IRB) at the University of Texas at Arlington, Arlington, Texas. The IRB approved the research proposal. After the IRB approval the participants were recruited from the agency.

4.6.1 Recruitment procedure

The research participants were recruited from AIDS Outreach Center of Fort Worth Texas. Recruitment procedure is described in the following section. The recruitment effort was

discussed in detail with the agency's supervisor. She supported these recruitment procedures as the most effective method to recruit participants and carry out data collection.

People coming in to the agencies seeking regular services initially learned about the study through the flyers attached in a bulletin board located in the waiting lounge. However, flyers were available for distribution to intake counselors working at the center. The researcher left the flyers in each of the counselor's room and at the reception desk. The flyer and survey are in Appendix (Appendix B). The flyer had the information about the research study.

The agency offered the researcher to use an available room to collect data. Interested participants were directed to the room. The room in the agency had a round table and several chairs. It was sufficiently large for more than one person to complete a survey in privacy. The participants completed the survey in that room. The researcher was also present in the room. When the research participant walked into the researchers' room, the research participant was first greeted by the researcher and then asked if she is interested to participate in the research study. If the client met all the inclusion criteria and was interested in participating,. They were told that participating in the research was completely voluntary, and if they felt uncomfortable answering the questions in the survey they could discontinue their participation. They were also made aware that if they decide not to participate in the research study, their services from the agency will not be affected. After explaining them in detail about the research and the content in the consent form, they were asked to read the consent form again and the they were asked to sign in the consent form. After which they were asked to complete the survey. Researcher had let the participant know that she will be available to answer any of their questions with regards to the research study.

The self-administered survey took about 20-25 minutes for the research participant to complete. The research participants were asked to place their completed surveys in an envelope provided by the researcher and place it in the box provided by the researcher. The completed surveys were collected by the researcher every day. Upon the placement of the

completed survey in the box the research participant received a $10 gift card in appreciation of their time and effort in completing the survey. The researcher maintained a list of the names of people who completed the survey and received the gift card to ensure that each participant received one gift card.

Like most research studies, the present study required that people reveal personal information about themselves. The investigator made every attempt to make the study as unintrusive as possible. All participants voluntarily participated in the study. They were informed that they can withdraw at any time. Confidentiality was ensured. Participants were informed of the steps taken to ensure confidentiality. Participants were informed of the purpose of the study.

The researcher replaced each participant's name with a random number. The researcher maintained a confidential list of the names of the participants with the assigned random number. This list was kept in a locked file cabinet only accessible to the researcher and supervising professor.

The agency was open on all the five days in the week. Monday and Thursday it was open from 8:30 to 5:00p.m, Tuesday and Wednesday it was open from 8:30 to 6:00 p.m. and on Friday it was open from 8:30 a.m. to 4:00p.m. The researcher was present in the agency during the open hours from Monday through Friday to recruit the participants for the research study. Agency records indicated that about 85-95 clients come to the agency each week. The supervisor in the agency estimated that the researcher could recruit the 64 research participants in less than one month.

4.6.2 Instruments

This study used a survey method. Rubin and Babbie (2009) states survey methods are especially useful when describing the characteristics of a larger population (Rubin & Babbie, 2009). Since the study was being conducted with the population of women living with HIV/AIDS and due to the sensitive nature of the questions, it was assumed that the participants of the study would be most comfortable using the self-administered survey. Therefore, a self-

administered survey method was used. The following survey instruments were used in the study: (1) Revised Conflict Tactic Scale (Straus et al., 1996), (2) The Multidimensional Scale of Perceived Social Support MSPSS (Zimet et al., 1988), (3) HIV/AIDS Questionnaire, (4) CAGE-AID (Brown and Round,1995) and, (5) a demographic questionnaire. Table 1 illustrates how each of these measures examines the variables of this research study. Also Table 2 will illustrate the different types of instruments and their level of measurement and its relevance to the study. A copy of the survey and cover letter are included in AppendixB.

Table 1: Constructs, Variables, and Measures

| Constructs and Variables | Measures |
|---|---|
| Age, Marital Status<br>Education<br>Husband's Income<br>Wife's Income<br>Ethnicity<br>Employment Status | Demographic Questionnaire |
| HIV/AIDS<br>HIV/AIDS status<br>Date of diagnosis<br>Partner's HIV/AIDS status<br>Partner's date of diagnosis<br>Disclosure of women's HIV/AIDS status<br>How was the disclosure made<br>When did the partner became aware of women's HIV status. | HIV/AIDS Questionnaire |
| Intimate Partner Violence<br>Physical Violence<br>Psychological Aggression<br>Sexual Violence | Conflict Tactic Scale (Straus et al., 1996) |
| Social Support<br>Support from friend<br>Support from family<br>Support from significant other | The Multidimensional Scale of Perceived Social Support (Zimet et al., 1988) |
| Screening tool for substance abuse | CAGE-AID (Brown and Round,1995) |

4.6.2.1 Demographic characteristics

Basic demographic characteristics which includes, education, ethnicity, income, age, marital status and employment data was obtained by using items from demographic questionnaire.

4.6.2.2 HIV/AIDS Questionnaire

A short instrument developed by the researcher was used to gather the data on the participant's and their partner's HIV status, mode of contraction and the length of time since their diagnosis. It also asked whether the women have disclosed her HIV/AIDS status to her partner or not, how the partner learned about women's HIV/AIDS status and when was the disclosure made. Lastly, it asks how the women contracted HIV/AIDS.

4.6.2.3 Conflict Tactic Scale

This instrument was first developed by Straus el al., in 1979 and it was revised in 1990 again. Conflict Tactic Scale measures the extent of Intimate Partner Violence experienced by married, dating or cohabiting couples. For the purpose of this research Revised Conflict Tactic Scale CTS-2 (1996) was used. CTS-2 (1996) consists of 39 pairs of items. Each item in the scale is duplicated to measure both the perpetration and victimization. It has four subscales namely Psychological Aggression, Physical Assault, Sexual Coercion and Consequence (Straus et al., 1990). Since this studyexamined the selected determinants of IPV on women living with HIV/AIDS and it also examined the frequency and severity of the physical, sexual and emotional violence experienced by women after the disclosure of her HIV status, therefore only 39 items were used to measure the intimate partner violence experienced by women. And the respondents were asked to fill out their experience with violence both before and after the diagnosis of their HIV/AIDS status. For the purpose of this study, only four subscales were used because these subscales helped in measuring the physical, sexual and emotional abuse experienced by women living with HIV/AIDS infection, also the purpose of using the consequence was to measure the severity of physical injury experienced by women living with

HIV/AIDS infection. The four sub-scales were as follows: - Psychological Aggression, Physical Aggression, Sexual Coercion and Consequences.

Psychological Aggression subscale measured psychological aggression perpetrated or experienced by the intimate partner (8 items, e.g., “I destroyed something belonging to my partner”, and “My partner did this to me”, “I called my partner fat or ugly” and “My partner called me fat or ugly”, “I shouted or yelled at my partner” and “My partner did this to me”) (Straus et al., 1990).

Physical Assault subscale measured the physical assault perpetrated or experienced by the intimate partner (8 items, e.g., “I pushed or shoved my partner” and “My partner did this to me”, “I slammed my partner against a wall and “My partner did this to me”) (Straus et al., 1990).

Sexual Coercion subscale measured the sexual assault perpetrated or experienced by the intimate partner (7 items, e.g., “I used force (like hitting, holding down, or using a weapon) to make my partner have oral or anal sex” and “My partner did this to me”, “I made my partner have sex without a condom” and “My partner did this to me”) (Straus et al., 1990).

Consequence subscale measured the physical injury and severity of abuse experienced by the intimate partner. Items in the scale were categorized to measure the mild or severe violence (6 items, e.g., “I threw something at my partner that could hurt” and “My partner did this to me”, “I had a sprain, bruise, or small cut because of a fight with my partner” and “My partner had a sprain, bruise, or small cut because of a fight with me”, “I used a knife or gun on my partner” and “My partner did this to me”, “I passed out from being hit on the head by my partner in a fight”, “My partner passed out from being hit on the head in a fight with me”, “I went to a doctor because of a fight with my partner and “My partner went to a doctor because of a fight with me”).

The frequency of each item in the scale was scored by using the eight point likert scale which ranged from "never, once, twice, 3-5 times, 6-10 times, 11-20 times, more than 20 times, or not in the past year but it did happen before". A Likert scale is a psychometric scale widely

used in surveys and questionnaire. It usually consists of the scale ranging in ascending or descending order. The participant in the research usually specifies their agreement to the statement by choosing the numbers which they feel were appropriate response (Babbie, 2005).

Conflict tactic scale was scored by adding the midpoints for the response categories chosen by the participant. The midpoints was the same as the response category numbers for Categories 0, 1, and 2. For Category 3 (3-5 times) the midpoint was 4, for Category 4 (6-10 times) it was 8, for Category 5 (11-20 times) it was15, and for Category 6 (More than 20 times in the past year) 25 was used as the midpoint. Response Category 7 ("Not in the past year, but it did happen before") was used in two ways: (a) When scores for the previous year was desired (the usual use of the CTS), Category 7 wasscored as 0; and (b) Category 7 was used to obtain a relationship prevalence measure of physical assault-that is, did an assault ever occur? Respondents who answer 1 through 7 were scored as 1 (yes). Here higher score indicated increased level of violence (Straus et al., p. 305, 1996). Revised Conflict tactic Scale has demonstrated good internal consistency of alpha (α) ranging from .79 to .95, test-retest reliability (Straus et al., 1996). Adequacy of the construct validity of this is scale has been demonstrated by previous studies (Straus et al., 1996).

4.6.2.4 The Multidimensional Scale of Perceived Social Support (MSPSS)

This instrument was first developed by Zimet et al., (1988). It measures perceived support from family, friends, and a significant other. MSPSS (1988) consists of 12 items. It has three subscales namely family support, friend support and significant other support, but for the purpose of this study social support was used only as composite measure and the types of support was not examined separately. Since this study is examining how social support relates to the frequency and severity of the violence experienced by women after the disclosure of women's HIV/AIDS status, therefore all the 12 items was used to measure the social support among women living with HIV/AIDS (Zimet, et al., 1988).

Support from family subscale measures perceived support received from the family members (4 items, e.g., “My family really tries to help me”, and “I get the emotional help and support I need from my family”, “I can talk about my problems with my family” and “My family is willing to help me make decisions”) (Zimet et al., 1988).

Support from friend subscale measures the support received from friends (4 items, e.g., “My friends really try to help me” and “I can count on my friends when things go wrong”, “I have friends with whom I can share my joys and sorrows” and “I can talk about my problems with my friends”) (Zimet et al., 1988).

Support from significant other subscale measures the support received from significant other (4 items, e.g., “There is a special person who is around when I am in need” and “There is a special person with whom I can share my joys and sorrows”, “I have a special person who is a real source of comfort to me.” and “There is a special person in my life who cares about my feelings” (Zimet et al., 1988).

Each item in the scale was scored by using the seven point likert scale which ranged from "very strongly disagree, strongly disagree, mildly disagree, neutral, mildly agree, strongly agree, and very strongly agree ". Higher scores indicated increased levels of social support (Zimet et al., 1988). The Multidimensional Scale of Perceived Social Support has demonstrated good internal consistency of alpha (α) ranging from .89 to .93, test-retest reliability, and construct validity (Zimet et al., 1996).

4.6.2.5 CAGE-AID (1995)

This instrument was developed by Brown and Round in 1995. It consists of 4 items. This instrument screened the respondents’ for their drug and alcohol use problem. The CAGE -AID is valid and reliable measure. Its reliability score ranges from .80 to .90. This instrument has established a good concurrent and divergent validity (Leonardson et al., 2005). Each of the 4 items in the scale has a dichotomized response that is either “yes” or “no”. See Appendix A.

Table 2: Table Showing the Surveys Used

| Measure | Relevance to Study | Level of Measurement | Purpose in Analysis |
|---|---|---|---|
| Demographic Scale | This instrument helped in gathering the demographic information of the participants. | Nominal and Interval/Ratio | It helped in assessing the total samples and was used to test the hypotheses. However, income ethnicity was used as independent variable. |
| HIV Questionnaire | This instrument gathered the information about the participant's and their partner's HIV status, disclosure, mode of contraction and the length of time since their diagnosis. | Ordinal and Interval/Ratio | It served as an independent variable and helped in finding if partner's awareness of women's HIV status predicts Intimate Partner Violence. |
| Conflict Tactic Scale | This instrument was used to gather the information on the extent of Intimate Partner Violence experienced by women living with HIV/AIDS. | Interval/Ratio | It served as a dependent variable in the analysis of frequency and severity of Intimate Partner Violence experienced by women after their partner became aware of their HIV status. |
| The Multi-dimensional Scale of Perceived Social Support | This instrument was used to gather information on the social support received from friends, family and significant other. | Interval/Ratio | It served as an independent variable which helped in finding if social support predicts of IPV. |
| Substance Abuse Screening Tool | This instrument was used to gather information on the uses of alcohol and illicit drugs by the participants. | Categorical | It served as the control variable. |

4.7 Data Analysis

The data was collected and entered into the Statistical Package for the Social Sciences (SPSS19). The data was analyzed by using various statistical processes. First the preliminary analysis was done to obtain descriptive statistics of the data. The descriptive information

included frequencies, percentages, means, and standard deviation of the demographic variables and the major variables of the data. Secondly, paired sample t-test was used to compare the means of IPV experienced by women before and after the diagnosis of HIV/AIDS infection. Finally the multivariate analysis was done by using one of the most rigorous statistical techniques called Multiple Regression in SPSS 19.

Multiple regressions, is a statistical method that helps us in learning about the relationship between several independent or predictor variables and a dependent or criterion variable (Allison, 1999). IPV was the criterion variable that waspredicted in this study and it was measured on continuous scale.

The predictor variables like partner HIV/AIDS status, partner's mode of contraction, disclosure of women's HIV/AIDS status, income and ethnicity was used to examine which indicator will predict the frequency and severity of IPV. As multiple regressions analysis requires at least five cases per independent variable (Allison, 1999). This study met the criteria of having five or more cases for each independent variable. The sample size determined through power analysis for the purpose of this study is sixty four; therefore multiple regression analysis was used to analyze the data.

# CHAPTER 5

# FINDINGS

## 5.1 Demographic Characteristics

A total of 64 women living with HIV/AIDS and seeking services from the AIDS Outreach Center of Forth-Worth agreed to participate in the study. As presented in Table 3, the average age of the research participants was 46.2 years (9.8%) at the time they filled out the survey. African-Americans (51.6%) represented the largest racial minority group in the total sample followed by European-Americans (29.6%), Hispanics (10.9%), Native Americans (4.7%) and others (3.1%).

One third (34.4%) of women in the study were separated/divorced; 29.6 % were married, 18.8% were never married, 12.5 % were cohabiting and 4.7% were widowed. A majority of the women (60.9%) had earned a high school diploma (GED); 17.7 % had an associate degree and 4.3% had a bachelor's degree, and 17.2% did not have any degree. Comparatively, women's partners were more educated than women; 68.8% of the women's partners had high school diploma, 10.6% had an associate degree, 4.7% had a bachelor's degree, 3.1 % had a master's degree, and only 12.5% did not have any kind of degree.

More of the women (34.2%) were unemployed than men (18.8%). Many of the men (40.6%) were employed full time, compared to only 15.6% of the women. More men (20.3%) than women (15.6%) were working part time. Equal percentages (10.9%) of men and women were retired. A large number of the women (85.9%) earned less than $20,000 per annum and only 14.1% of the women earned a yearly salary between $20,001 and $35,000. Similarly 73.4% of the men earned less than $20,000 per year; 10.9 %t earned $20,001-$35,000, 9.4% earned $35,001 -$50,000, 1.6% earned $50,001- $65,000, 1.6 % earned $65,001-$80,000 and

3.1% earned more than $95,000. Results indicate that the men's level of income was comparatively higher than that of the women's but the differences were not significant.

Table 3: Descriptive Statistics for Demographic Variables (*N* = 64)

| Variable | *M* | Median | Mode | *SD* |
|---|---|---|---|---|
| Age | 46.2 | 47 | 48 | 9.8 |
| | | *N* | | % |
| Race/Ethnicity | | | | |
| European-American | | 19 | | 29.6 |
| African-American | | 33 | | 51.6 |
| Hispanic | | 7 | | 10.9 |
| Native-American | | 3 | | 4.7 |
| Others | | 2 | | 3.1 |
| Marital Status | | | | |
| Married | | 19 | | 29.6 |
| Widowed | | 3 | | 4.7 |
| Separated/Divorced | | 22 | | 34.4 |
| Never Married | | 12 | | 18.8 |
| Cohabitating | | 8 | | 12.5 |
| Women's Education | | | | |
| High School Diploma (GED) | | 39 | | 60.9 |
| Associate Degree | | 11 | | 17.7 |
| Bachelor's Degree | | 3 | | 4.7 |
| Master's Degree | | 0 | | 0 |
| None of the above | | 11 | | 17.2 |
| Male Partner's Education | | | | |
| High School Diploma (GED) | | 44 | | 68.8 |
| Associate Degree | | 7 | | 10.6 |
| Bachelor's Degree | | 3 | | 4.7 |
| Master's Degree | | 2 | | 3.1 |
| None of the above | | 8 | | 12.5 |
| Women's Employment Status | | | | |
| Working full time | | 10 | | 15.6 |
| Working part time | | 10 | | 15.6 |
| Unemployed | | 22 | | 34.4 |
| Retired | | 7 | | 19.0 |
| Stay home mom by choice | | 9 | | 14.1 |
| Disabled | | 6 | | 9.4 |
| Male Partner Employment Status | | | | |
| Working full time | | 26 | | 40.6 |
| Working part time | | 13 | | 20.3 |
| Unemployed | | 12 | | 18.8 |
| Retired | | 7 | | 10.9 |
| Stay home father by choice | | 5 | | 7.8 |
| Disabled | | 1 | | 1.6 |

*Table continues*

*Table 3 continued*

| Variable | *N* | % |
|---|---|---|
| Women's Income | | |
| Less than $20,000 | 55 | 85.9 |
| $20,000-$35,000 | 9 | 14.1 |
| Male Partner's Income | | |
| Less than $20,000 | 47 | 73.4 |
| $20,000-$35,000 | 7 | 10.9 |
| $35001-$50,000 | 6 | 9.4 |
| $50,001-$65,000 | 1 | 1.6 |
| 65,001-$80,000 | 2 | 3.1 |
| $80,001 and greater | 1 | 1.6 |

## 5.2 Descriptive Analyses

### 5.2.1 Disclosure of HIV/AIDS status

As shown in Table 4, almost all women (93.2%) had disclosed their HIV/AIDS status to their current intimate partner. One hundred percent of the Hispanic women participating in the research study had disclosed their HIV/AIDS status to their intimate partner as compared to 94.7% of the European-American women and 90.9% of the African American women. There was no significant difference among the groups.

### 5.2.2 Substance Abuse

As presented in Table 4, a majority of the women participating in the research study (56.2%) were not abusing substance; 43.2% of the women in the sample were currently abusing substances. Approximately 70% of the Hispanic women participating in the research study reported that they were not, compared to 60% of African-American and 52.6% of the European-American women. Again, there was no significant difference among the groups.

### 5.2.3 Partner's HIV Status

The results depicted in Table 4, indicate that 71.9% of the women's partners were HIV negative. 20.3% of them were HIV positive and in 7.8% of the cases the

partner's status was unknown. About 84% of the European-American women participating in the research study had an intimate partner whose HIV/AIDS status was negative, followed by 66% of the African-American and 42 % of the Hispanic women. The differences among the groups were not significant.

5.2.4 Social Support

Results suggest that women had high levels of social support. As shown in Table 4, half (50%) of the women in the study reported they had high levels of social support, 28.1% of the women had moderate levels and only 21.9% reported having a low level of social support. Around 90% of the European-American women reported that they had moderate to high levels of social support, while 76% of the African-American and 57% of the Hispanic women reported support at those levels. There was a statistically significant difference among the groups, as determined by one-way ANOVA ($F(4, 59) = 3.626$, $p = .010$).

Table 4: Descriptive Statistics for All Major Variables in the Study for Women (*N* = 64)

| Major Variable | N | % |
|---|---|---|
| Disclosure | | |
| Disclosed HIV Status | 60 | 93.8 |
| Not Disclosed | 4 | 6.2 |
| Substance Abuse | | |
| Abusing Substance | 28 | 43.8 |
| Not Abusing Substance | 36 | 56.2 |
| Partner's HIV Status | | |
| HIV Positive | 13 | 20.3 |
| HIV Negative | 46 | 71.9 |
| Unknown | 5 | 7.80 |
| Social Support | | |
| High Acuity (69-84) | 32 | 50.0 |
| Moderate Acuity (49-68) | 18 | 28.1 |
| Low Acuity (12-48) | 14 | 21.9 |

## 5.3 IPV Before and After the Diagnosis of HIV/AIDS

Due to the unexpectedly high disclosure of HIV/AIDS by women to their partners, the researcher turned her attention to the actual diagnosis of HIV/AIDS. Diagnosis and disclosure were synonymous for the large majority of the women in this sample.

To measure the frequency of the various forms of IPV experienced by women before and after the diagnosis of HIV/AIDS, three new variables were computed. Subscales were created by aggregating the items from the Conflict Tactic Scale:

(1) Frequency of Physical Violence. The subscale was created by summing 18 items from the scale (items numbered 2,3, 4, 6, 8, 9, 11, 13,14, 16,17,18, 19,23, 24, 25, 28, 29);

(2) Frequency of Sexual Violence. Four items from the scale (items numbered 5,7, 20, 22) were added to create this subscale;

(3) Frequency of Emotional Violence. For this subscale, 7 items from the scale (items numbered 1, 10, 12, 15, 21, 26, and 27) were added up.

Similarly three new variables were computed to measure the severity of the various form of IPV experience by women before and after the diagnosis of HIV/AIDS. The following subscales were used for measuring the severity of different forms of IPV:

(1) Severity of Physical Violence: The subscale was created by totaling 10 items from the scale (item numbers 8, 9, 11, 13, 14, 16, 18, 24, 25, and 29);

(2) Severity of Sexual Violence: Two items from the scale (7, 20) were added up;

(3) Severity of Emotional Violence: The subscale was created by adding up 4 items from the scale (10, 12, 26, and 27).

Mean scores for the frequency and severity of physical, sexual and emotional IPV experienced by women before and after HIV/AIDS diagnosis are presented in Table 5. A paired sample t-test was conducted to examine the overall difference in the frequency of IPV and severity of IPV experienced by women before and after HIV/AIDS diagnosis.

5.3.1 Frequency of IPV

As presented in Table 5, there was a statistically significant difference in the frequency of overall IPV experienced before (M=35.50, SD= 41.19) and after (M=45.32, SD=48.15) the diagnosis of HIV/AIDS; t (63) = -2.52, p = 0.014. There was also a statistically significant difference in the frequency of physical IPV experienced by the women before (M=18.34, SD= 26.79) and after (M=26.68, SD=34.06) the diagnosis of HIV/AIDS; t (63) = -2.57, p = 0.013. Similarly, there was a statistically significant difference in the frequency of sexual IPV experienced by the women before (M=5.43, SD= 6.41) and after (M=6.92, SD=7.98) the diagnosis of HIV/AIDS; t (63) = -2.08, p = 0.041. Although the frequency of emotional IPV increased both before (M=11.71, SD= 11.8) and after (M=13.82, SD= 13.3) the diagnosis of HIV/AIDS, the difference was not statistically significant.

Table 5: Difference in Experience Regarding Frequency of IPV Before and After the Diagnosis of HIV/AIDS

| IPV Type | $M_{Before\ HIV}$ | $SD_{Before\ HIV}$ | $M_{After\ HIV}$ | $SD_{After\ HIV}$ | t | df |
|---|---|---|---|---|---|---|
| Overall | 35.50 | 41.1 | 45.32 | 48.1 | -2.52* | 63 |
| Physical | 18.34 | 26.7 | 26.68 | 34.0 | -2.57* | 63 |
| Sexual | 5.430 | 6.40 | 6.920 | 7.90 | -2.08* | 63 |
| Emotional | 11.71 | 11.8 | 13.82 | 13.3 | -1.69 | 63 |

*Note*. * = $p < .05$.

5.3.2 Severity of IPV

As presented in Table 6, there was a statistically significant difference in the severity of overall IPV experienced before (M=23.64, SD= 40.1) and after (M=49.84, SD=88.2) the diagnosis of HIV/AIDS; t (63) = -2.82, p = .006. There were also significant differences in the severity of all forms of IPV experienced before and after the HIV/AIDS diagnosis. There was a statistically significant difference in the severity of physical IPV experienced by the women before (M=14.25, SD= 28.68) and after (M=31.56, SD=57.82) the diagnosis of HIV/AIDS; t (63) = -2.76, p = 0.008. Similarly, there was a statistically significant difference in the severity of sexual IPV experienced by the women before (M=2.79, SD= 6.82) and after (M=5.73, SD=10.90) the diagnosis of HIV/AIDS; t (63) = -2.34, p = 0.022. Severity of emotional IPV before (M=6.59, SD= 11.39) and after (M=12.54, SD= 22.98) the diagnosis of HIV/AID infection was also found have a statistically significant difference: t (63) = -2.54, p = 0.014.

Table 6: Difference in the Experience of Severity of IPV Before and After the Diagnosis of HIV/AIDS

| IPV Type | $M_{Before\ HIV}$ | $SD_{Before\ HIV}$ | $M_{After\ HIV}$ | $SD_{After\ HIV}$ | t | df |
|---|---|---|---|---|---|---|
| Overall Severity | 23.64 | 40.10 | 49.84 | 88.20 | -2.82** | 63 |
| Physical | 14.25 | 28.60 | 31.56 | 57.80 | -2.76** | 63 |
| Sexual | 2.790 | 6.800 | 5.730 | 10.90 | -2.34* | 63 |
| Emotional | 6.59 | 11.30 | 12.54 | 22.90 | -2.54* | 63 |

*Note*. * = $p < .05$, ** = $p < .01$.

## 5.4 Substance Abusing Women

Paired sample t-test was done to analyze the difference in the experience of the frequency and severity of physical, sexual and emotional IPV experienced by substance abusing and non substance abusing women before and after HIV/AIDS diagnosis. Table 7 and Table 8 presents the difference in the frequency and severity of IPV experienced by substance abusing women before and after the diagnosis of HIV/AIDS status.

### 5.4.1 Frequency of IPV

As presented in Table 7, there was a statistically significant difference in the frequency of physical, sexual and emotional IPV experienced by the substance abusing women before and after the diagnosis of HIV/AIDS status. There was also a statistically significant difference in the frequency of physical IPV experienced by the women before (M=17.78, SD= 22.38) and after (M=32.53, SD=34.55) the diagnosis of HIV/AIDS; t (27) = -3.72, p = .001. Similarly, there was a statistically significant difference in the frequency of sexual IPV experienced by the women before (M=5.21, SD= 6.20) and after (M=8.26, SD=8.29) the diagnosis of HIV/AIDS; t (27) = -3.60, p = .001. Although the frequency of emotional IPV increased both before (M=12.53, SD= 9.7) and after (M=15.96, SD= 11.3) the diagnosis of HIV/AIDS, the difference was not statistically significant.

Table 7: Difference in Experience Regarding Frequency of IPV Before and After the Diagnosis of HIV/AIDS Among Substance Abusing Women

| IPV Type | $M_{Before\ HIV}$ | $SD_{Before\ HIV}$ | $M_{After\ HIV}$ | $SD_{After\ HIV}$ | t | df |
|---|---|---|---|---|---|---|
| Physical | 17.78 | 22.38 | 32.53 | 34.55 | -3.72** | 27 |
| Sexual | 5.210 | 6.200 | 8.46 | 8.290 | -3.60** | 27 |
| Emotional | 12.53 | 9.700 | 15.96 | 11.30 | -1.84 | 27 |

*Note*. * = $p < .05$, ** = $p < .01$.

5.4.2 Severity of IPV

As presented in Table 8, there was a statistically significant difference in the severity of all forms of IPV experienced before and after the HIV/AIDS diagnosis among substance abusing women. There was a statistically significant difference in the severity of physical IPV experienced before (M=14.37, SD= 23.1) and after (M=40.03, SD=58.1) the diagnosis of HIV/AIDS; t (27) = -2.89, p = .007. Similarly, there was a statistically significant difference in the severity of sexual IPV experienced by the women before (M=2.44, SD= 5.11) and after (M=8.30, SD=12.16) the diagnosis of HIV/AIDS; t (27) = -3.44, p = .002. Severity of emotional IPV before (M=7.19, SD= 11.00) and after (M=13.39, SD= 21.23) the diagnosis of HIV/AID infection was also found have a statistically significant difference: t (27) = -2.17, p = .039.

Table 8: Difference in Experience Regarding Severity of IPV Before and After the Diagnosis of HIV/AIDS Among Substance Abusing Women

| IPV Type | $M_{\text{Before HIV}}$ | $SD_{\text{Before HIV}}$ | $M_{\text{After HIV}}$ | $SD_{\text{After HIV}}$ | t | df |
|---|---|---|---|---|---|---|
| Physical | 14.37 | 23.15 | 40.03 | 58.18 | -2.89** | 27 |
| Sexual | 2.440 | 5.110 | 8.30 | 12.16 | -3.44** | 27 |
| Emotional | 7.190 | 11.00 | 13.39 | 21.23 | -2.17* | 27 |

*Note*. * = p < .05, ** = p < .01.

## 5.5 Non-Substance Abusing Women

### 5.5.1 Frequency of IPV

As presented in Table 9, there was no statistically significant difference in the frequency of physical, sexual and emotional IPV experienced by the women who were not abusing substance before and after the diagnosis of HIV/AIDS status. Although the frequency of physical IPV before (M=18,77 SD= 30.09) and after (M=22.13, SD=33.44); sexual IPV before (M=5.61, SD= 6.66) and after (M=5.72, SD=7.63); and emotional IPV before (M=11.08, SD= 13.30) and after (M=12.16, SD=14.69) experienced by the women not abusing substance increased after the diagnosis of HIV/AIDS status , the difference was not statistically significant.

Table 9: Difference in Experience Regarding Frequency of IPV Before and After the Diagnosis of HIV/AIDS Among Women not Abusing a Substance

| IPV Type | $M_{\text{Before HIV}}$ | $SD_{\text{Before HIV}}$ | $M_{\text{After HIV}}$ | $SD_{\text{After HIV}}$ | *t* | *df* |
|---|---|---|---|---|---|---|
| Physical | 18.77 | 30.09 | 22.13 | 33.44 | -.75 | 35 |
| Sexual | 5.610 | 6.660 | 5.720 | 7.630 | -.11 | 35 |
| Emotional | 11.08 | 13.30 | 12.16 | 14.69 | -.64 | 35 |

Note. * = p < .05, ** = p < .01.

### 5.5.2 Severity of IPV

As presented in Table 10, there was no statistically significant differences in the severity of all forms of IPV experienced before and after the HIV/AIDS diagnosis among women who were not abusing substance. Although the severity of physical IPV before (M=114.15, SD=

32.67) and after (M=29.97, SD=57.48); sexual IPV before (M=3.06, SD= 7.96) and after (M=3.73, SD=9.51); and emotional IPV before (M=6.12, SD= 11.73) and after (M=11.88, SD=24.53) experienced by the women not abusing substance increased after the diagnosis of HIV/AIDS status , the difference was not statistically significant.

Table 10: Difference in Experience Regarding Severity of IPV Before and After the Diagnosis of HIV/AIDS Among Women not Abusing a Substance

| IPV Type | $M_{\text{Before HIV}}$ | $SD_{\text{Before HIV}}$ | $M_{\text{After HIV}}$ | $SD_{\text{After HIV}}$ | *t* | *df* |
|---|---|---|---|---|---|---|
| Physical | 14.12 | 32.67 | 29.97 | 57.48 | -1.24 | 35 |
| Sexual | 3.060 | 7.960 | 3.730 | 9.510 | -.380 | 35 |
| Emotional | 6.120 | 11.73 | 11.88 | 24.53 | -1.69 | 35 |

## 5.6 Hypothesis Testing

### 5.6.1 Hypothesis 1

Disclosure of women's HIV status increases the frequency and severity of physical, sexual and emotional IPV that she experiences.

#### 5.6.1.1 Frequency of IPV.

Table 11 presents the results of the regression analyses conducted to test the hypotheses for the frequency of IPV. The first regression model presented in Table 11, examined the effect of disclosure of women's HIV/AIDS status, substance abuse, partner's HIV/AIDS status, ethnicity, social support, age, and income on frequency of physical IPV experienced by women before the diagnosis of HIV/AIDS. Similarly the second model presented in Table 11, examined the effect of all the above mentioned independent variables on the frequency of sexual IPV experienced by women before the diagnosis of HIV/AIDS. Finally in the third model emotional IPV was regressed upon all the independent variables listed above. As depicted in Table 11, disclosure of women's HIV/AIDS status, substance abuse, partner's HIV/AIDS status, ethnicity, social support, age, income and frequency of physical, sexual and

emotional violence experienced by women after the diagnosis of HIV/AIDS was evaluated in the same way as the frequency of physical, sexual, and emotional IPV before HIV/AIDS. The regression results indicated that the independent variables did not significantly predict the frequency of physical, sexual, or emotional IPV experienced by women before and after the diagnosis of HIV/AIDS.

Table 11: Regression of Frequency of Physical, Sexual, and Emotional IPV Experienced by Women Before and After the HIV/AIDS Diagnosis for Selected Predictors

| IPV Variable | Before HIV | | | | After HIV | | | |
|---|---|---|---|---|---|---|---|---|
| | r | β | $R^2$ change | p | r | β | $R^2$ change | p |
| Model 1: Physical | | | .189 | | | | .108 | |
| Disclosure of HIV Status | .052 | .061 | | .619 | .104 | .105 | | .423 |
| Substance Abuse | -.019 | -.053 | | .680 | .134 | .153 | | .319 |
| Partner's HIV Status | .060 | -.078 | | .559 | -.055 | .073 | | .694 |
| Ethnicity | .138 | .245 | | .063 | .100 | .023 | | .467 |
| Social Support | .255 | -.318 | | .018* | -.210 | -.214 | | .124 |
| Age | .232 | .252 | | .049* | .174 | .189 | | .154 |
| Income | -.140 | -.115 | | .353 | -.035 | -.010 | | .938 |
| Model 2: Sexual | | | .176 | | | | .114 | |
| Disclosure of HIV Status | -.073 | -.050 | | .686 | -.011 | -.003 | | .979 |
| Substance Abuse | -.031 | -.085 | | .510 | .172 | .152 | | .256 |
| Partner's HIV Status | .179 | .069 | | .611 | .143 | .015 | | .916 |
| Ethnicity | .176 | .282 | | .035* | .045 | .130 | | .340 |
| Social Support | -.251 | -.302 | | .026* | -.210 | -.206 | | .137 |
| Age | .189 | .170 | | .183 | .175 | .166 | | .209 |
| Income | -.007 | .027 | | .828 | .072 | .101 | | .435 |
| Model 3: Emotional | | | .117 | | | | .089 | |
| Disclosure of HIV Status | -.006 | -.006 | | .963 | .070 | .065 | | .620 |
| Substance Abuse | .061 | .025 | | .851 | .142 | .114 | | .400 |
| Partner's HIV Status | .116 | -.007 | | .962 | .097 | -.018 | | .902 |
| Ethnicity | .153 | .218 | | .113 | .003 | .057 | | .677 |
| Social Support | -.184 | -.223 | | .108 | -.205 | -.196 | | .164 |
| Age | .165 | .173 | | .190 | .150 | .151 | | .257 |
| Income | -.132 | -1.02 | | .431 | -.093 | -.076 | | .563 |

*Note*. *$p < .05$.

5.6.1.2 Severity of IPV.

Table 12 presents the results of the regression analyses conducted to test the hypotheses for the severity of IPV. The first regression model presented in Table 12, examined

the effect of disclosure of women's HIV/AIDS status, substance abuse, partner's HIV/AIDS status, ethnicity, social support, age, and income on severity of physical IPV experienced by women before the diagnosis of HIV/AIDS. Similarly, the second model presented in Table 12 examined the effect of all the above-mentioned independent variables on the severity of sexual IPV experienced by women before the diagnosis of HIV/AIDS. Finally in the third model emotional IPV was regressed upon all the independent variables listed above. As depicted in Table 12, disclosure of women's HIV/AIDS status, substance abuse, partner's HIV/AIDS status, ethnicity, social support, age, income and severity of physical, sexual and emotional violence experienced by women after the diagnosis of HIV/AIDS were evaluated in the same way as the severity of physical, sexual, and emotional IPV before HIV/AIDS. The regression results indicated that that the independent variables did not significantly predict the severity of physical, sexual, or emotional IPV experienced by women before and after the diagnosis of HIV/AIDS.

5.6.2 Hypothesis 2

The greater the level of social support of women with HIV/AIDS infection has, the lower the frequency and severity of physical, sexual and emotional IPV that she will experience.

5.6.2.1 Frequency of IPV.

As shown in Table 11, the results indicated that social support did not significantly predict the frequency of physical sexual and emotional IPV experienced by women before and after the diagnosis of HIV/AIDS.

Although disclosure of women's HIV status contributed 43.5% of the variance ($R^2$=.18, $F(63) = 1.83$, $p>.05$), substance abuse contributed 32.9% of the variance ($R^2$=.10, $F(63) = .96$, $p>.05$) partner's HIV status contributed 41.9% of the variance ($R^2$=.17, $F(63) = 1.70$, $p>.05$) and social support contributed 34.2% of the variance ($R^2$=.11, $F(63) = 1.06$, $p>.05$) none of these independent variables predicted the frequency of physical, sexual and emotional IPV among women before and after the diagnosis of their HIV/AIDS status.

5.6.2.2 Severity of IPV.

As shown in Table 12, social support significantly predicted the severity of the various type of IPV experienced by women before the diagnosis of HIV/AIDS. However, social support did not significantly predict the severity of any type of IPV after the diagnosis of HIV/AIDS.

Two independent variables explained 59.6% of the variance (R2=.35, F (63) = 4.41, p<.01) of physical IPV before HIV/AIDS diagnosis. Social support (β = -.57, p<.01), and age (β = -.68, p<.05), significantly predicted the severity of physical IPV experienced by women living with HIV/AIDS before the diagnosis of their HIV/AIDS status. Ethnicity (β = 3.9, p<.05), and social support (β = -.16, p<.01); (R2=.29, F (56) = 3.25, p<.05) significantly predicted the severity of sexual violence experienced by women before the diagnosis HIV/AIDS. Social support (β = -.363, p<.05) was the only significant predictor of emotional violence experienced by women before diagnosis of HIV/AIDS.

As also shown on Table 12, social support was not a significant predictor of the severity any form of IPV after HIV/AIDS diagnosis. Age (β = .32, p<.05) was the only significant predictor of severity of physical IPV after the diagnosis of HIV/AIDS. No independent variables were found to significantly predict sexual or emotional IPV after diagnosis of HIV/AIDS.

5.6.3 Hypothesis 3

Women whose partners are not infected with HIV/AIDS are more likely to experience higher frequency and severity of physical, sexual and emotional IPV, compared to those whose partners' are HIV infected.

5.6.3.1 Frequency of IPV.

The regression model presented in Table 5 includes partner's HIV status in addition to the variables: substance abuse, disclosure of women's HIV status, ethnicity, social support, age, income and frequency of physical sexual and emotional violence experienced by women before and after the diagnosis of HIV/AIDS. Partner's HIV status did not significantly predict the

frequency of physical, sexual, and emotional violence experienced by women before and after the diagnosis of HIV/AIDS.

5.6.3.2 Severity of IPV.

The regression model presented in Table 6 includes partner's HIV status in addition to the variables: substance abuse, disclosure of women's HIV status, ethnicity, social support, age, income and frequency of physical sexual and emotional violence experienced by women before and after the diagnosis of HIV/AIDS. Partner's HIV status did not significantly predict the severity of physical, sexual, and emotional violence experienced by women before and after the diagnosis of HIV/AIDS.

Table 12: Regression of Severity of Physical, Sexual, and Emotional IPV Experienced by Women Before and After the HIV/AIDS Diagnosis for Selected Predictors

| IPV Variable | Before HIV | | | | After HIV | | | |
|---|---|---|---|---|---|---|---|---|
| | r | β | $R^2$ change | p | r | β | $R^2$ change | p |
| Model 1: Physical | | | .356 | | | | .188 | |
| Disclosure of HIV Status | .127 | .127 | | .251 | .141 | .151 | | .223 |
| Substance Abuse | .004 | -.021 | | .854 | .130 | .094 | | .461 |
| Partner's HIV Status | -.019 | -.213 | | .078 | .122 | -.019 | | .887 |
| Ethnicity | .027 | .220 | | .061 | .098 | .154 | | .240 |
| Social Support | -.483 | -.571 | | .000** | -.159 | -.158 | | .231 |
| Age | .215 | .235 | | .039* | .297 | .326 | | .012* |
| Income | -.068 | -.049 | | .658 | -.159 | -.127 | | .307 |
| Model 2: Sexual | | | .289 | | | | .191 | |
| Disclosure of HIV Status | .097 | .099 | | .392 | .131 | .123 | | .318 |
| Substance Abuse | -.046 | -.148 | | .216 | .029 | .151 | | .239 |
| Partner's HIV Status | .179 | .068 | | .589 | .186 | .039 | | .768 |
| Ethnicity | .146 | .262 | | .035* | .215 | .255 | | .054 |
| Social Support | -.420 | -.487 | | .000** | -.156 | -.176 | | .182 |
| Age | .053 | .031 | | .794 | .171 | .198 | | .117 |
| Income | -.150 | -.109 | | .347 | -.175 | -.115 | | .355 |
| Model 3: Emotional | | | .195 | | | | .159 | |
| Disclosure of HIV Status | .146 | .146 | | .237 | .141 | .148 | | .241 |
| Substance Abuse | .047 | -.008 | | .951 | .033 | -.010 | | .938 |
| Partner's HIV Status | .091 | -.046 | | .728 | .080 | -.033 | | .810 |
| Ethnicity | .148 | .257 | | .052 | .168 | .230 | | .087 |
| Social Support | -.301 | -.363 | | .007 | -.154 | -.199 | | .141 |
| Age | .144 | .163 | | .196 | .206 | .240 | | .064 |
| Income | -.111 | -.068 | | .581 | -.169 | -.132 | | .297 |

*Note*. *$p < .05$; ** = $p < .01$.

# CHAPTER 6

# DISCUSSION

This chapter presents the summary of the study findings and the important conclusions drawn from the collected data. It also provides a discussion on how the findings support the findings in the literature and identifies areas where the studies' findings are inconsistent with the literature. This section also discusses the strengths and limitations of the study, as well as the implications for social work practice, policy, education and future research.

## 6.1 Discussion of Findings

### 6.1.1 Disclosure of HIV/AIDS status

An important finding of this study is that almost all women in the sample (93%) had disclosed their HIV status to their current intimate partner. This finding differs substantially from previous research. For example, Armisted et al., (1999) found that only 56% of the research participants in their study had disclosed their HIV/AIDS status to their partner. Stein et al., (1998) found that 40% of the people living with HIV/AIDS had not disclosed their status to their partner and Kalichmanand and Nachimson, (1999) found that 59% of their study sample had disclosed their HIV status to their partner. Because this study found that so many women had disclosed their HIV/AIDS status to their partners, the focus of the study turned to examining women's experiences with physical, sexual and emotional IPV related to the diagnosis of HIV/AIDS instead of their disclosure. In this study, diagnosis of HIV/AIDS was somewhat synonymous with disclosure.

Gielen et al. (2000) who have done much of the ground breaking research in the area of HIV/AIDS disclosure and IPV have found high rates of disclosure. They found that 95% of the women in their study had disclosed their HIV/AIDS status to more than one person in their lifetime.

They measured disclosure by asking whether the participants had disclosed their HIV/AIDS status or not; the researchers did not ask to whom the participants disclosed their HIV/AIDS status.

The high rate of disclosure among the sample of women in the current study, compared to disclosure rates in some other studies, may be due to a variety of reasons. Probably most importantly, some of the women in the current study were participating in a support group and attended support-group meetings. Women may have felt that support-group meetings had helped them to decide to disclose their HIV/AIDS status to their intimate partners. Research participants from the other studies reporting disclosure rates (Rothenberg et al., 1995; Weir et al, 2008; Zierler et al, 2000) most likely were not attending support group meeting.

Another possible reason for the high disclosure rate in this study was that the majority of the women were residing with their partners and thus disclosure was probably difficult to avoid. It is unclear from other studies how many of the participants were living with their partners at the time of the study.

In the current study, less than 25% of the women's partners were infected with HIV/AIDS. This finding is similar to the findings in other studies. For example, in Geilen et al.'s (2000) study only 24% of the women's partners' status was either HIV negative or unknown. Partners may have thought that the women were honest about their diagnosis and that they had given them the choice of either staying in the relationship or leaving. They might not have felt they were being cheated. Some partners chose to stay in the relationship and support the women in their fight against HIV/AIDS.

6.1.2 Diagnosis of HIV/AIDS status and it relationship to IPV

This study found that the frequency of IPV among women living with the HIV/AIDS infection increased significantly after their HIV/AIDS diagnosis. All forms of violence physical, sexual, and emotional IPV increased significantly following the HIV/AIDS diagnosis. Similarly, other research studies (Williams et al., 2008; Zierler et al., 2000) have found a relationship between the diagnosis of HIV/AIDS and increased risk of IPV. For example, Zierler et al (2000) found that the among research participants who reported experiencing IPV, around 50% of them attributed the violence to their diagnosis of HIV/AIDS status. However, Zierler's et al (2000) study did not examine the violence experienced by the research participant before the diagnosis of their HIV/AIDS status and hence did not really determine whether there was an increase or decrease in violence after the diagnosis of HIV/AIDS. The current study indicates that the frequency of IPV significantly increased among more than 90% of the research participants after the diagnosis of HIV/AIDS. Likewise Williams et al (2008) found that experience of IPV increased among women living with HIV/AIDS after their diagnosis.

This study found that the severity of IPV significantly increased after the diagnosis of the women's HIV/AIDS status. None of the other research studies (Williams et al., 2008; Zierler et al., 2000), known to the author, examined the severity of IPV after the diagnosis of HIV/AIDS status. For example Zierler et al (2000) examined how the diagnosis of HIV/AIDS status relates to the experience of IPV but it did not examine the severity of IPV after the diagnosis of HIV/AIDS unlike the current study. Also Williams et al (2008) compared the experience of IPV among HIV-negative and HIV-positive women, but they did not examine the severity of IPV after the diagnosis of HIV/AIDS.

The results of this study support the feminist-theorist view, which asserts that IPV results from the values of patriarchal societies that promote the sense of supremacy in men and socializes men and women to experience and exert power in dissimilar ways (Dobash & Dobash, 1979; Yick, 2001). The increase in severity of IPV after the diagnosis of HIV/AIDS

could be due to the increased vulnerability of women to men's domination due to the diagnosis of HIV/AIDS status. Women are at a risk of experiencing greater abuse, if they are economically dependent on men (Dobash et al., 1979). The diagnosis of HIV/AIDS may result in women's loss of employment and this in turn may contribute to greater vulnerability and an increase in the violence these women experience.

The increase in the frequency and severity of physical, sexual, and emotional IPV after the diagnosis of HIV/AIDS could also be due to the patriarchal societal norms and values which promote gender inequalities. Men and women in patriarchal societies are taught to exercise power in different ways. Men are trained to be aggressive in order to use power and gain supremacy over women (Pence & Paymar, 1993; Schechter, 1982). These patriarchal values are reinforced when men find out that their partner is infected with HIV/AIDS. It is possible that men perceives that the women would have contracted HIV infection through sexual contact outside the relationship, which may bring in the sense of loss of control over the women's body among the men, and this in-turn increases their likelihood of exerting power over women by suppressing and controlling them. Thereby the women's experience with the frequency of IPV might have increased significantly after the diagnosis of her HIV/AIDS status.

### 6.1.3 Social Support

An important finding of this study is that many women reported that they experienced high levels of social support overall. In fact, 50% of the women expressed that they had high levels of social support and 28% had moderate levels at the time they participated in the research study. Many studies have found that social support helps people living with the HIV/AIDS infection to cope with the disease and adhere to their treatment regimen (Haitcox 2009; Scwarz, 2003; Simoni et al., 2002). Although research studies done in the past clearly signify the value of social support among people living with HIV/AIDS, no studies known to the researcher have specifically examined how social support relates to the experience of violence among women living with HIV/ AIDS after their diagnosis.

Studies (Castaeno et al., 2008; Panchanadeswaran et al., 2008) have found that social support reduces the adverse physical and mental health consequences of IPV and can serve as a protective factor against IPV. For example, Castano and his colleague (2008) found that women who had strong social support were 89% less likely to be abused than were women who did not have any kind of social support. Panchanadeswaran et al., (2008) found that around 45% of research participants in their study experienced high rates of IPV, due to the low level of perceived social support. Although the studies have examined the role of social support as a protective factor against IPV, researchers have not assessed the independent effect of social support on frequency and severity of physical, sexual and emotional violence among HIV/AIDS-infected women before and after the diagnosis of their HIV/AIDS status. In this study, the level of social support significantly predicted the severity of physical, sexual and emotional IPV for women before their diagnosis of HIV/AIDS. However, social support did not significantly predict the frequency of IPV among women after the diagnosis of their HIV/AIDS status. The level of social support experienced after HIV/AIDS diagnosis also did not predict frequency or severity of IPV experienced.

The finding that social support did not serve as a protective factor following HIV/AIDS diagnosis may be related to the various negative consequences associated with the diagnosis of HIV/AIDS. Research studies have consistently found that people living with HIV/AIDS are isolated from their families, places of employment and society due to the various physical and mental health problems associated with the diagnosis (Holmes et al., 2003; Kaiser, 2002; Watstein & Chandler, 1998).

The finding that social support did not serve as a protective factor following HIV/AIDS diagnosis also suggests that multiple issues are involved in the victimization of IPV. For example, even though many women participants in the study were attending support group meetings which could have acted as an important social support, it is possible that many of the women experienced less family and friendship contact following their diagnosis. Perhaps friends

and family were concerned about “catching” the disease. Perhaps the women felt compelled to resign from their employment or perhaps they were terminated after their HIV/AIDS diagnosis became apparent. This study did not examine women’s specific sources of social support, but it is clear that the interaction of social support, HIV/AIDS diagnosis and IPV is complex and needs further study.

Feminist theorists and social capital theorists assert that a high level of social support among women acts as an important protective factor against IPV (Davis et al., 2001). If women living with HIV/AIDS have high levels of social support available through social networks to which the women belong, men are more likely to lose power over them, and women are less likely to be controlled and viewed as targets for violence in a relationship (Davis, Taylor, & Furniss, 2001). Thus, women’s vulnerability to IPV is likely to decrease (Baumgartner, 1993; Cooney, 1998). The current study found that, although social support appeared to be an important protective factor for experiencing various forms of IPV before the diagnosis of HIV/AIDS, social support failed to remain a protective factor of IPV following the diagnosis of HIV/AIDS.

6.1.4 Ethnicity and IPV

Some research studies (Caetano, Field, Ramisetty-Mikler, & McGrath, 2005; Cazenave & Straus, 1995; Straus et al., 1995), have found that IPV is higher among ethnic minority women than among European-American women. For example, previous studies have found that IPV is 3.7 times higher among African-American women, compared to European Americans, (Cazenave & Straus, 1995) and the rate of IPV among Hispanics is two times higher than that for European Americans (Cazenave etal., 1995). Caetano, Field, Ramisetty-Mikler and McGrath (2005) found that the incidence, prevalence, and recurrence of IPV were 14% among Hispanics and African Americans, while only 6% among European Americans.

The research on the role of ethnicity and IPV is inconsistent. Goodley (2007) and Smith et al (2002) found that the ethnicity is not the significant predictor of IPV. The results of the

current study also indicate that ethnicity is not a significant predictor of the frequency of physical, sexual, and emotional IPV before or after the diagnosis of HIV/AIDS. Ethnicity was not the significant predictor of severity of physical, sexual, and emotional IPV after the diagnosis of HIV/AIDS. This study found that ethnicity was only a significant predictor of severity of sexual IPV before HIV/AIDS diagnosis (but it was not a significant predictor of the severity of physical and emotional IPV).

6.1.5 Education and IPV

The findings from this study indicate that the study's participants' partners were somewhat more highly educated than the participants. However there was no statistically significant difference between the women's partner and women in terms of their education level. The current study indicates no significant difference in level of education among the people with the experience of frequency and severity of IPV before and after the diagnosis of their HIV/AIDS status. This finding is consistent with Cunradi et al (2000), who found that there was no significant difference in level of education among the people who experienced violence. However, the findings are contradictory to the findings of other studies indicating that women who have lower level of education are at higher risk of experiencing IPV (Ackerson et al., 2008; Boy & Kulczycki, 2008; Boyle et al., 2009).

6.1.6 Substance Abuse and IPV

Findings from this study suggest that the frequency and the severity of the physical, sexual and emotion IPV increases significantly among women abuse substance after the diagnosis of the HIV/AIDS status. This finding is consistent with the findings previous research studies which found that the rate of IPV is higher among those who were abusing substance than among those who were not abusing substance (Fals-Stewart, 2003; O'Farrell & Murphy, 1995). McCauley et al. (1995) found that substance abuse use among low-income women, who are divorced or separated, to be an important risk factor for the occurrence of violence.

It is difficult to explain the increased experience of frequency and severity of IPV among women abusing substance in the current study. There are several studies which suggests that women's substance abuse problem directly or indirectly plays a causal role in women's experiences with violence (Richardson & Campbell, 1982). Some researchers assert that women experiencing IPV abuses substance in order to cope with the issue of violence in their lives (Harris & Fallot, 2001).It is unclear if the violence or the substance abuse came first. In the current study women might have been abusing substance due to the fact that they were diagnosed with HIV/AIDS.

## 6.2 Limitations of the Research

This study has several limitations. One major limitation is that the study relied on retrospective, self-report, recall data with respect to IPV experience before and after disclosure. As stated by Wenzel et al (1995), the disadvantage of using self-report data is, "respondent bias such as recall and underreporting of sensitive information" (p. 1142). After talking with the women in support group meeting, the researcher became convinced that the experience of IPV is under-reported in this study. This may mainly be due to two reasons. First, the women are currently residing with their partners and they do not want to complain about them. Second, many of the women felt that, even if they have fights and disagreements sometimes, they would like to resolve the issue by themselves, to avoid outside interference. Therefore, they did not identify the violence as violence.

Participants were asked to recall IPV experienced before and after HIV/AIDS disclosure, which can lead to inaccuracies and bias. The recall period varied from 2 years to 30years. Although it was a lengthy recall period, there is a possibility that women might have recalled abusive events accurately due to the intensity of the experience of IPV. As Geilen (2000b) stated, "when recall period is lengthy, we believe that the salience of the events is likely to be high and thus reporting fairly accurate" (p. 118). No agency-based information was used to verify the information provided by the research participants.

Another limitation of this study is that the sample size was very small. Only 64 women were surveyed. As stated by Rubin and Babbie (2011), the main disadvantage of having the small sample size is that, it leads to higher variability, which, in turn, weakens the reliability of the results. Results from the small sample size cannot statistically represent the study population, and thereby poses a threat to external validity (Rubin and Babbie, 2011). However, the power analysis conducted prior to the study indicated that the sample size of 64 was appropriate for the study. The researcher was also limited in time for gathering data and in funds for providing participants with an incentive.

Another limitation of the study is that all the women were recruited from only one agency serving the people living with HIV/AIDS. Thus, the sample was limited to those women who had access to that agency which limits the generalizability of the study. The sample was collected from only one agency because the other agencies the researcher contacted were not willing to let me conduct the research study in their agencies as they required submission of an approved IRB proposal. The IRB requires a written proof from the agency saying that they will let the researcher conduct the study there to approve a research proposal. Still other agencies the researcher contacted were not sure whether or not they would let the researcher conduct the study. Keeping these constraints in mind, the researcher decided to collect the data from AIDS Outreach Center of Fort Worth, since they had already evaluated the researcher's proposal and their board had given the approval to conduct the research study there.

The use of convenient sampling was also an important limitation of this study. Data collected through convenient sampling limits the ability to generalize the findings to the larger population (Rubin & Babbie, 2011). The data collected through the non-random sampling method limits the chances of the research participant to be randomly selected from the study population, thereby leading to selection bias and this makes it difficult to extrapolate findings from the sample to the population (Rubin & Babbie, 2011).

The survey in the study was distributed through face-to-face contact and thus, there is a possibility of missing out on people who would not have come to the agency when the research study was conducted. The hard-copy version was chosen because the survey contained questions that were sensitive in nature and discussions with agency personnel suggested that this would be the most effective recruitment method. Although the researcher considered using an internet survey version, but determined that, even though this would have provided privacy, it would have increased the risk of excluding the people who did not have internet access.

Yet another factor which may have compromised the ability to collect reliable data is related to the presence of researcher during the time the research participants were filling out the survey. This may have considerably increased the influence of social desirability bias which is the tendency of research participants to respond in a way that will be viewed positively by others (Rubin et al., 2011). Also the fact that the data was collected through self report measure would have contributed considerably to the increase in social desirability bias (Shacham et al., 2012). This may pose several threats to the validity of the results. Since the questions in the survey of the current study were sensitive and private in nature, therefore there is a high likelihood that the respondents might have under-reported their experience with IPV.

Another limitation of this study is that it did not examine the independent effect of substance abuse on IPV among women living with HIV/AIDS. This study just screened the women for their substance abuse use problem. Also it did not examined whether the women's partner were abusing substance or not. Research studies done in the past have clearly indicated that women whose partner's abuses substance are more likely to perpetrate violence against their intimate partner (Fals-Stewart, 2003; O'Farrell & Murphy, 1995).

The current study had several strength. It builds on the existing knowledge base by documenting that the increase in the experience of the frequency and severity of different types of IPV following an HIV/AIDS diagnosis. This is the first study which measures the frequency and severity of different forms of IPV experienced by women after their diagnosis of HIV/AIDS.

The strength of this study lies in its use of primary data collection to study the frequency and severity of various types of IPV before and after a woman's diagnosis of HIV/AIDS. The study provided an additional perspective in understanding the dynamics of IPV among HIV-infected women. Since this study is quantitative in nature, it provides empirical data about types of IPV experiences associated with an HIV/AIDS diagnosis. Additionally, this study examined social support in relation to IPV and HIV/AIDS. Although studies consistently find that social support serves as an important protective factor for many adverse life experiences, this study did not find social support to be a protective factor for any type of IPV following HIV/AIDS diagnosis.

## 6.3 Implications for Social Work Practice

The frequency and severity of IPV increased following the diagnosis of HIV/AIDS. An important social work implication of the study for the social work practitioners and health personnel working in the agency should be to screen all the women living with HIV/AIDS coming in to the agency to seek services for IPV. Awareness of this increased risk of IPV is critical in order to help find ways to keep women safe. Social workers need to provide women receiving an HIV/AIDS diagnosis with appropriate safety planning services and referral information.

The finding that physical, sexual and emotional IPV all increased following women's HIV/AIDS diagnosis suggests that interventions around IPV may need to focus on all forms of violence. Women learning that they are HIV infected need to be provided with specific information about how all forms of IPV are likely to increase following their diagnosis. Some women may only consider physical IPV as problematic (Coker et al., 2003) but social workers need to help women understand their right to be free from all forms of abuse. Discussion of a safety plan for IPV needs to begin when discussing the HIV/AIDS diagnosis.

Social workers and health-care professionals working for women living with HIV/AIDS should take an individualized approach in routinely screening clients for severity of IPV. Every health-care professional working for women living with HIV/AIDS should regularly screen them

for IPV, whether or not they see any evidence of abuse. Further, HIV-positive women experiencing IPV should be referred to an intervention program which focuses on women's empowerments. Programs like Domestic Violence Prevention Enhancement and Leadership through Alliances (DELTA) may be beneficial in empowering these women. The main aim of DELTA is: "to prevent IPV across a lifetime than any single strategy or policy change" (CDC, 2011). These interventions are effective and important tools for eliminating violence from the lives of women. Further, intervention programs should be developed in such a way that the women's experiences with the severity of violence can be measured through a pre-test survey at the time they register for the intervention program. And after the completion of the intervention program post-test data on their experience with violence should be collected. This will assist the health care professionals in finding whether the intervention program is effective or not in reducing violence. It is very important to maintain the reduction of IPV.

Social workers and health-care providers may need to be especially vigilant in asking about support systems following an HIV/AIDS diagnosis and linking women to needed resources and support systems. Women may greatly benefit from being referred to support groups of women living with HIV/AIDS and experiencing IPV.

The majority of the women in the study were earning less than $20,000 annually, therefore they were residing in low-income areas of Dallas-Fort Worth, Dallas and Arlington. They had limited accessibility to the agency, as they did not have personal vehicles and had to rely on the public transportation. This acted as a barrier for seeking services from the agency. Bus services were provided to the client for only two days in a week. In order to overcome this barrier, effort should be made to make the service accessible to the clients. A regular mode of transportation should be provided to the clients.

Although the findings of the study suggest that ethnicity was a significant predictor of severity of sexual IPV before the diagnosis of HIV/AIDS status, but it was not a significant predictor of physical and emotional IPV, social workers and health-care profession should

ensure that the interventions addressing IPV among women who are diagnosed with HIV/AIDS are culturally relevant. Lockhart and Danis (2010), emphasized the importance of cultural competence in working with women who have been abused: “each domestic violence survivor brings a mix of cultural influences reflecting their own culture of origin, current status in the physical and political world as well as the influence of the dominant social economic and political cultures” (p. 25). To reduce the severity of IPV among women living with HIV/AIDS, it is very important to develop culturally sensitive interventions. Service providers developing these interventions, should be aware of the fact that an approach working best for European Americans might not work as effectively for African Americans or Hispanics (Rubin & Babbie 2011; Whitaker et al., 2007).

## 6.4 Implication for Social Work Policy

The finding from this study suggests that the frequency and severity of physical, sexual and emotional IPV increases among women after the diagnosis of their HIV/AIDS status. This result has implications for policies related to HIV/AIDS and IPV. The domestic violence policies should mandate that agencies working for people living with HIV/AIDS have a policy guideline that encourages routine screening for IPV among HIV/AIDS-infected individuals.

In order to advocate for new policies and to amend existing policies, it is important for social workers to be cognizant about domestic violence and HIV/AIDS laws and policies. For example, according to international Community of Women Living with HIV/AIDS (ICW), women living with HIV/AIDS should not only enjoy fundamental human rights but should also be involved in decision and policy-making processes to address the needs of this particular population (ICW 2004).Women should be involved in agencies’ decision-making processes too, with regards to reform in medical, legal and social policies. There are two programs, United Nations Declaration of a Programme for Action (1982) and the Paris Principle of Greater Involvement of People Living with HIV/AIDS, ( 1994) which advocated for HIV-positive women’s rights to participate in these decision-making processes in agencies working for people living

with HIV/AIDS (ICW 2004e). Although this policy has been passed, agencies working for this population have hardly involved HIV-positive women in reformation of decision making process with regards to medical, legal and social policies (Paxton and Welbourn, 2004). Therefore it is imperative for e social workers to be aware of these public policies and advocate for the welfare of their female clients who are living with HIV/AIDS.

## 6.5 Implication for Social Work Education

This research emphasizes the importance of teaching social work students about the co-occurrence of IPV and HIV/AIDS and how women's risk of all forms of IPV increases following diagnosis of HIV/AIDS. It is important for social work educators to develop effective teaching models that recognize the effect of various risks and protective factors in the experience of IPV among women living with HIV/AIDS. Social work educators can also help students better understand the impact of social support on the disclosure process. Social work educators can focus on helping students in developing prevention programs addressing the risk factors that contribute towards the experience of IPV among HIV/AIDS-infected women. This also will help social workers in implementing appropriate services for welfare of women living with HIV/AIDS.

## 6.6 Implication for Social Work Research

There are several important implications for social work research, given the findings of the present study. As research addressing the intersection of HIV and violence is scarce and in the formative stages (Manfrin-Ledet &Porche, 2003), there is an immense need for studies focusing on the causal relationship between the disclosure and diagnosis of HIV/AIDS status and the experience of IPV. Research studies investigating the safest manner of disclosure of HIV/AIDS status to the partner is needed, so that the findings from these studies can help women in deciding if and how to disclose their status to their partner. Given the limitation that such as small sample size and collection of data was done only from one agency, future studies

should obtain larger sample sizes and also consider collecting data from several agencies located all over the US to improve the generalizability of the findings.

Further, research studies are needed to assess the intervention programs and support groups working with women living with HIV/AIDS who have experienced IPV. Pre-test and post-test data should be collected to evaluate the effectiveness of programming focusing on the reduction of IPV among women living with HIV/AIDS.

Future research studies also need to investigate possible causes for the increase in various types of IPV following HIV/AIDS diagnosis. Studies have found that the diagnosis of HIV/AIDS often leads to the loss of employment (Greener, 2002). This in turn deepens the socio-economic hardship of the family members, thereby increasing their financial burden (Kaiser, 2007). These psychological and socio-structural factors may also contribute to increasing the risk of IPV among women. Diagnosis of HIV/AIDS may not be the sole reason for the increase in the frequency and severity of the various types of IPV among women infected with HIV/AIDS. Future research may help us better understand how other factors may come contribute to the increases of the various types of IPV following an HIV/AIDS diagnosis.

Due to the fact that there are only very few research studies available on the disclosure of HIV/AIDS status and its relationship to IPV, there is a lack of in depth knowledge on this issue to improve our understanding of it. Qualitative and mixed-method inquiry would provide the in-depth and rich data which, in turn, will help the researchers in understanding this complex issue of co-occurrence of IPV and HIV/AIDS among women. The qualitative research will help in obtaining insights about the experience of IPV among women living with HIV/AIDS. Also the future research should focus on conducting longitudinal study so that more information on the experiences of IPV after the disclosure of women's HIV/AIDS status could be obtained.

Women's experiences with IPV over a period of time after the disclosure of HIV/AIDS status could be examined. The results of the study indicated that more than 40% of the women in the study were abusing substance. Substance abuse could be an important factor

contributing towards the experience of increased rates of IPV among women. Therefore, future research studies should focus on investigating the types and frequency of substance abused by women and their partners and its relationship to IPV among women living with HIV/AIDS.

Future research studies may also benefit from examining various items on the CTS-2. Perhaps specific items on the scale can provide important insight into specific kinds of abuse that women are more likely to experience following HIV/AIDS disclosure and diagnosis.

## 6.7 Conclusions

This study adds to the knowledge base of the relationship between HIV/AIDS and IPV. It explored how women experienced more violence after the diagnosis of her HIV/AIDS status. This study found that the frequency and the severity of the physical, sexual and emotional violence increased after the diagnosis of HIV/AIDS.

This study found that social support served as an important protective factor against IPV before a diagnosis of HIV/AIDS but did not similarly serve as a protective factor against IPV following the diagnosis of HIV/AIDS status. These disheartening findings challenge service providers and policy makers alike to address the critical issue of IPV and HIV/AIDS. The challenge must be met. Violence against women in all its forms must end, and especially, violence against those women with HIV/AIDS.

# APPENDIX A

## THE MEASURES AND THE DEMOGRAPHIC QUESTIONNAIRE

1. REVISED CONFLICT TACTIC SCALE (CTS-2)

No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired, or for some other reason. Couples also have many different ways of trying to settle their differences.

This is a list of things that might happen when you have differences. Please circle how many times your partner did them in the past year. If your partner did not do one of these things in the past year, but it happened before that, circle "7."

Please read each item carefully and circle the number that corresponds an answer and best describes your relationship. Please answer all the questions.

In the survey the score of:

1 = Once in a year

2 = Twice in a year

3 = 3-5 times in a year

4 = 6-10 times in a year

5 = 11-20 times in a year

6 = More than 20 times in a year

7 = Not in the past year, but it did happen before

| | | Before HIV | | | | | | | | After HIV | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | My partner insulted me | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 2 | My partner threw something at me that could hurt. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 3 | My partner twisted my arm and hair. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 4 | I had a sprain, bruise, or small cut because of a fight with my partner. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 5 | My partner made me have sex without a condom. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 6 | My partner pushed or shoved me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 7 | My partner used force (like hitting, holding down, or using a weapon) to have oral or anal sex. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 8 | My partner used a knife or gun on me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 9 | I passed out from being hit on the head by my partner in a fight. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 10 | My partner called me fat or ugly. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 11 | My partner punched or hit with something that could hurt. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 12 | My partner destroyed something belonging to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 13 | I went to a doctor because of a fight with my partner. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 14 | My partner choked me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 15 | My partner shouted or yelled at me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 16 | My partner slammed me against a wall. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 17 | I needed to see a doctor because of a fight with my partner, but I didn't. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 18 | My partner beats me up. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 19 | My partner grabbed me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 20 | My partner used force (like hitting, holding down, or using a weapon) to make me have sex. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 21 | My partner stomped out of the room or house or yard during a disagreement. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 22 | My partner insisted on sex when I did not want (but did not use physical force). | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 23 | My partner slapped me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 24 | I had a broken bone from a fight with my partner. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 25 | My partner burned or scolded me on purpose. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 26 | My partner accused me of being a lousy lover. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 27 | My partner threatened to hit or throw something at me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 28 | I felt physical pain that still hurt the next day because of a fight with m**y** partner. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 29 | My partner kicked me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |

2. HIV/AIDS QUESTIONNAIRE

**Direction.** Read each item carefully and please answer all the questions.

1) **When was the diagnosis made**
   Date: ----------
   Month: ----------
   Year: ----------

2) **What is your partner's HIV/AIDS status**
   1) positive
   2) negative
   3) unknown

3) **When was your partner diagnosed with HIV/AIDS infection**
   1) Date: ----------
   2) Month: ----------
   3) Year: ----------

4) **How many people, including your partner, have you had sex with in the last month?**
   1) Only with my partner
   2) 1-3 people other than my partner
   3) 4-6 people other than my partner
   4) More than 6 people other than my partner

5) **Do you and your partner use condom while having sex? Yes/No**

6) **Have you disclosed your HIV/AIDS status to your partner?**
   1) No
   2) Yes

7) **If yes, when did you disclosed your HIV status**
   Date : ----------
   Month: ----------
   Year: ----------

8) **How was the disclosure made?**
   1. I disclosed my status to my partner
   2. My status was disclosed to him by the hospital personnel
   3. My status was disclosed to him by my friends and relative
   4. If any other way, please specify_____
   _____
   _____
   _____
   _____
   _____
   _____

9) Please share how did you decided to disclose your diagnosis to your partner?
   _____
   _____

10) What was the process of disclosing your diagnosis like?

11) How did you expect your partner to react to your diagnosis?

12) How did your partner react to your diagnosis?

13) What are your thoughts about the safest manner of sharing one's diagnosis?

3. MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT

This is a 12-item instrument used to measure the social support. Please read each statement carefully and indicate how you feel about each statement. Each item is accompanied by a 7-point response range. Please read each item carefully and circle the number that corresponds the answer and best describes your feelings. Please answer all the questions. Please note that higher scores on the social support scale indicate more social support.

1 = Very Strongly Disagree

2 = Strongly Disagree

3 = Mildly Disagree

4 = Neutral

5 = Mildly Agree

6 = Strongly Agree

7 = Very Strongly Agree

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | There is a special person who is around when I am in need. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2 | There is a special person with whom I can share my joys and sorrows. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3 | My family really tries to help me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4 | I get the emotional help and support I need from my family. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 | I have a special person who is a real source of comfort to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6 | My friends really try to help me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7 | I can count on my friends when things go wrong. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | I can talk about my problems with my family. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9 | I have friends with whom I can share my joys and sorrows. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10 | There is a special person in my life who cares about my feelings. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11 | My family is willing to help me make decisions. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12 | I can talk about my problems with my friends. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

4. CAGE-AID

**Directions.** The questions that follow are about your use of alcohol and other drugs. Your answers will be kept private. Mark the response that best fits for you.

1. Have you ever felt you need to cut down on your drinking or drug use?

___ Yes ___ No

2. Have people annoyed you by criticizing your drinking or drug use?

___ Yes ___ No

3. Have you felt guilty about your drinking or drug use?

___ Yes ___ No

4. Have you ever had a drink or used drug first thing in the morning to steady your nerves to get rid of a hangover?

___ Yes ___ No

5. DEMOGRAPHIC QUESTIONNAIRE

Direction. Read each item carefully and please circle the number that corresponds the answer and best describes you. Please answer all the questions. Please remember the definition of partner here is the person with whom you are currently living with and having a physical relationship.

1) **What is your Age: _____**

2) **What is you marital status**
   a. Married
   b. Widowed
   c. Separated/ Divorced
   d. Never Married
   e. Cohabitating

3) **What is your ethnicity**
   a. European American
   b. African America
   c. Hispanic
   d. Native American
   e. Others (Please specify)_____

4) **What is the highest degree you earned?**
   a. High school diploma or equivalency (GED)
   b. Associate degree (junior college)
   c. Bachelor's degree
   d. Master's degree
   e. PhD
   f. None of the above (less than high school)

5) **What is the highest degree you earned?**
   a. High school diploma or equivalency (GED)
   b. Associate degree (junior college)
   c. Bachelor's degree
   d. Master's degree
   e. PhD
   f. None of the above (less than high school)

6) **Which of the following best describes your current employment status?**
   a. Working full time
   b. Working part-time
   c. Unemployed or laid off
   d. Retired
   e. Stay home mom by choice

**7) Which of the following best describes your partner's current employment status?**

a. Working full time
b. Working part-time
c. Unemployed or laid off
d. Retired
e. Stay home dad by choice

**8) How many people are currently living in your household, including yourself?**

_____Number of people
_____Of these people, how many are under 18 years of age?
_____Of the adults, how many bring income into the household?

**9) Which of these categories best describes your total income for the past 12 months?**

a) Less than $20,000
b) $20,001 through $35,000
c) $35,001 through $50,000
d) $50,001 through $65,000
e) $65,001 through $80,000
f) $80,001 through $95,000
g) $95,001 and greater

**10) Which of these categories best describes your total income for the past 12 months?**

a) Less than $20,000
b) $20,001 through $35,000
c) $35,001 through $50,000
d) $50,001 through $65,000
e) $65,001 through $80,000
f) $80,001 through $95,000
g) $95,001 and greater

***Thank you so much for completing this survey***

# APPENDIX B

# THE COVER LETTER, THE INFORMED CONSENT, LETTER TO THE AGENCY AND THE RECRUITMENT FLYER

COVER LETTER

Dear Participant,

Both Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) and intimate partner violence (IPV) are significant public health and social problems in the United States and worldwide. The goal of this research project is to learn more about your experience of disclosing your HIV/AIDS status to your intimate partner. You are therefore invited to participate in the study. The questionnaire is anonymous.

Your participation is completely voluntary and you can discontinue your participation in this study at any time, without consequence. Also, you are free not to answer any questions that you find too personal or sensitive. If you agree to participate, I will ask you to sign a consent form and answer the questionnaire. It is very important that you sign the consent form so we are able to include your answers in our results. To ensure confidentiality, please be sure to return the consent form to me. You will then be asked to answer the questionnaire. It is estimated that the questionnaire will take approximately 20 to 25 minutes to complete.

The information collected will remain confidential and no individual identifying information will be used.

If you have questions about this project or your rights as a research participant, please contact the researcher at the address below or the doctoral dissertation advisor, Dr. Beverly Black, at beverlyblack@uta.edu. You may keep this form.

Thank you very much for your participation.

Researcher: Yasoda Sharma
PhD Student,
212 S. Cooper Street
School of Social Work
University of Texas at Arlington
Arlington, TX 76019
806-543-0911
yasoda.sharma@mavs.uta.edu

**INFORMED CONSENT**

Researcher: Yasoda Sharma

**Women's HIV status and their relationships?**

This Informed Consent will explain about your participation in this research study. It is important that you read this material carefully and then decide if you wish to participate as a volunteer in a research study being conducted by Yasoda Sharma, a Ph.D. student at the University of Texas at Arlington, Arlington, Texas.

Objective

The purpose(s) of this research study is/are as follows:

(1) To determine whether disclosure of women's HIV status relates to the frequency and severity of IPV she experiences.
(2) To examine how social support relates to the frequency and severity of IPV experienced by women living with HIV infection; and
(3) To examine how a partner's HIV status relates to the frequency and severity of IPV experienced by women living with HIV infection.

DURATION

The expected duration of your participation is 20 to 25 minutes.

PROCEDURES

The procedures, which will involve you as a research subject, include: Reading this consent form, signing this consent form, and completing the questionnaire. The questionnaires consist of questions related to your experience of violence after the diagnosis of your HIV infection.

POSSIBLE RISKS/DISCOMFORTS

The questions in the survey are sensitive in nature and may cause emotional reaction. Since you participation is completely voluntary, if you feel uncomfortable answering any questions, you can withdraw from the study at any time without consequence. Also, you are free not to answer any specific questions that you find too personal or sensitive. If you experience any discomfort you will be provided with counseling options by the researcher.

However, after you have finished and returned your questionnaire, you can no longer withdraw from the study because your questionnaire will not be identifiable as belonging to you. This action helps assure that your participation is anonymous. Choosing not to participate in the study will have no effect on your relationship with the agency.

POSSIBLE BENEFITS

The possible benefits of your participation are:

Contribute to knowledge base of the relationship between IPV and HIV that may lead to more effective preventive and intervention effort.

COMPENSATION

As an appreciation for your time you will receive a $10 gift card to Wal-Mart.

ALTERNATIVE PROCEDURES / TREATMENTS

There are no alternative procedures or course of treatment that might be available if you elect not to participate in this study. However, participation is completely voluntary and you may decline or withdraw at no consequences.

CONFIDENTIALITY

Every attempt will be made to see that your study results are kept confidential. A copy of the records from this study will be stored in Dr. Beverly Black's office, in a locked file cabinet for at least 3 years after the end of this research. Her office is located at 211 S. Cooper Street, Arlington, TX, 76019 at University of Texas at Arlington.

The results of this study may be published and/or presented at meetings without naming you as a subject. Although your rights and privacy will be maintained, the Secretary of the Department of Health and Human Services, the UTA IRB, and personnel particular to this research (Yasoda Sharma, and the UTA Social Work Department) have access to the study records. Your informed consent form and questionnaire will be kept completely confidential and separately according to current legal requirements. They will not be revealed unless required by law, or as noted above. A coding system linking your scores to your consent form will be created to protect anonymity.

FINANCIAL COSTS

There will be no financial cost to you as a participant in this research study.

CONTACT FOR QUESTIONS

If you have any research-related questions or problems at any time, you may call Yasoda Sharma at (806) 543-0911 or Dr. Beverly Black at (817) 272-3941. You may call the Chairman of the Institutional Review Board at (817) 272-1235 for any questions you may have about your rights as a research subject.

VOLUNTARY PARTICIPATION

Participation in this research study is voluntary.

You may refuse to participate or quit at any time. If you quit or refuse to participate, the benefits (or treatment) to which you are otherwise entitled will not be affected. You may quit by refusing to answer the questionnaire.

By signing below, you confirm that you are at least 18 year old have read this document. You have been and will continue to be given the chance to ask questions. You freely and voluntarily choose to be in this research project.

PRINCIPAL INVESTIGATOR _____
DATE

SIGNATURE OF PARTICIPANT _____
DATE

AUG 2 3 2011

APPROVED

AUG 2 2 2012

Institutional Review Board

LETTER TO THE AGENCY

Women's HIV status and their relationship

Both Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) and intimate partner violence (IPV) are significant public health and social problems in the United States and worldwide. The goal of this research project is to learn more about the severity of physical, sexual, and emotional violence experienced by women living with HIV/AIDS.

Focus of study. Many research studies have focused on the relationship between HIV and IPV. However, we know little about how IPV changes upon HIV diagnosis. This study will examine how the prevalence rate of IPV changes in a relationship when a woman discloses her HIV status to her partner. It will specifically assess how a woman's HIV diagnosis relates to the severity and frequency of the IPV victimization she experiences. I hypothesize that when a woman's discloses her HIV status to her intimate partner, she will experience increased levels of physical, sexual and emotional violence.

Sample/Instrument: I hope to sample about 64 women who are living with HIV/AIDS. I will ask the women to complete a survey which will take about 20-25 minutes. The survey will include the revised Conflict Tactic Scale (CTS-2) which measures IPV, Social Support Scale, CAGE- AID screening tool for substance abuse, HIV/AIDS questionnaire, and demographic questionnaire. The Conflict Tactic Scale contains around 29 questions measuring the physical, sexual, and emotional violence experienced by the women. Social support Scale contains around 12 questions measuring the support received from family, friends and significant others. Demographic questions will ask age, monthly income, marital/relationship status, history of drug use, and ethnicity. HIV/AIDS survey will ask questions pertaining to the date of diagnosis of HIV status, mode of transmission, and frequency of violence after the diagnosis of HIV.

Procedure/Timeline: I intend to administer the survey over a one month period of time depending on the availability of women willingness to complete the surveys. I seek your expertise in the best method to administer the survey.

Thank you. In appreciation for assistance with the research project, the researcher will offer to organize and provide a one day workshop for the agency for women living with HIV/AIDS who have experienced or are concerned about experiencing IPV. In addition, each participant who completes a survey will receive a $10 gift card as a thank you. The findings of the study will hopefully help service provider better assist women living with HIV who are experiencing IPV.

FLYER

# Women's HIV status and their relationships

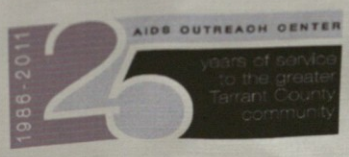
Would you like to fill out a short survey and get a gift card of $10?

**Program Info**
This research project will help in learning more about women living with HIV/AIDS and their relationships

You are eligible to participate in this study if

- You are a women, 18 years and older
- HIV +
- Having a partner

If you are interested in participating contact me at
yasoda.sharma@mavs.uta.edu
Ph # 806-543-0911




AIDS OUTREACH CENTER
www.aoc.org

April 25, 2011

To Whom It May Concern:

Yasoda Sharma will be conducting her research study at the AIDS Outreach Center in Fort Worth. We look forward to working with her on this project.

Sincerely,

Shawna Stewart, MA, LPC
Director of Mental Health Services



400 North Beach Street • Fort Worth, Texas 76111 • (817) 335-1994 • Fax: (817) 916-4668
Information Line: (817) 336-0066

United Way
Community Partner

# APPENDIX C

## THE TABLE ON SELECTED LITERATURE REVIEW

| Author (Year) | Aim | Study Sample | Method | Result | Limitation of the study |
|---|---|---|---|---|---|
| Coker et al. (2000) | To estimate IPV prevalence by type and associated physical health consequences among women seeking primary health care. | 1152 women, between the ages of 18 to 65 years, recruited from family practice clinics. | Cross-sectional survey design. | Of 1152 women surveyed, 53.6% ever experienced any type of partner violence; 13.6% experienced psychological IPV without physical IPV. Women experiencing psychological IPV were significantly more likely to report poor physical and mental health (adjusted relative risk [RR], 1.69 for physical health and 1.74 for mental health). Psychological IPV was associated with a number of adverse health outcomes, including a disability preventing work (adjusted RR, 1.49), arthritis (adjusted RR, 1.67), chronic pain (adjusted RR, 1.91), migraine (adjusted RR, 1.54) and other frequent headaches (adjusted RR, 1.41), stammering (adjusted RR, 2.31), sexually transmitted infections (adjusted RR, 1.82), chronic pelvic pain (adjusted RR, 1.62), stomach ulcers (adjusted RR, 1.72), spastic colon (adjusted RR, 3.62), and frequent indigestion, diarrhea, or constipation (adjusted RR, 1.30). Psychological IPV was as strongly associated with the majority of adverse health outcomes as was physical IPV. | |
| Campbell et al. (2002) | To examine the physical health problems of women who were abused with that of women who were not abused. | 441 women aged 22 to 55 years were recruited. | Cross-sectional study design | Rates of gynecological problem were similar among women who reported physical and sexual IPV. Abused women reported headaches, back pain, STDs, vaginal bleeding, vaginal infections, appetite loss, abdominal pain, and digestive problems. | |

| Author (Year) | Aim | Study Sample | Method | Result | Limitation of the study |
|---|---|---|---|---|---|
| El-Bassel, Gilbert, Wu, Go, & Hill (2005) | This study examines the temporal relationships between sexual and/or physical partner violence (IPV) and sexual risk of HIV/STI transmission. | 416 women enrolled in methadone maintenance treatment programs in New York City | Study participants were interviewed at baseline (wave 1) and received follow-up interviews at 6 months (wave 2) and 12 months (wave 3) | Women who reported always using condoms at wave 2 were significantly less likely than women who reported inconsistent or no condom use to experience subsequent IPV at wave 3. Similarly, increased risk of IPV at wave 3 was associated with self-reported STIs and unprotected anal sex, always requesting that partners use condoms was associated with a significant decrease in subsequent IP. Findings also suggest that IPV at wave 2 decreased the subsequent likelihood of always using condoms at wave 3 and always requesting that a partner use condoms. | The findings may not be generalizable to women in the general population or to other populations of women in drug treatment. |
| Gielen et al. (2000a) | To examine the women's concern and experience with the disclosure of their HIV status. | 310 HIV-positive and 301-HIV negative women who were 18 years or older were recruited from agencies providing services. | Mixed method was used. Cross-sectional survey design and qualitative interview was used. | Results indicated that 46.5% of the participants were offered help from the health-care provider to disclose their HIV status to their intimate partner. Overall, 67% of the women had experienced IPV. Of the women who had experienced violence, 34 % experienced violence before their HIV status had been determined, 16% experienced violence after the diagnosis, and 17% reported that they experienced violence both before and after the diagnosis. | |

| Author (Year) | Aim | Study Sample | Method | Result | Limitation of the study |
|---|---|---|---|---|---|
| Gielen et al. (2000b) | To examine the frequency of disclosure of HIV status and it adverse consequence on women's lives. | 257 HIV-positive women between the ages of 18 and 44, recruited from HIV/AIDS primary care clinics and from community site | Face to face interview was conducted. | Negative consequences associated with others knowing they were HIV-positive were reported by 44%, most commonly the loss of friends (24%), being insulted or sworn at (23%), and being rejected by family (21%).There were 10 women (4%) who reported being physically or sexually assaulted as a result of their being HIV positive, and 16% reported having no one they could count on for money or a place to stay. Violence was widespread in this sample, with 62% having experienced physical or sexual violence, including sexual abuse or rape (27%), being beaten up (34%), and weapon-related violence (26%). Logistic regression analysis indicated that women with a history of physical and sexual violence were significantly more likely to experience negative social and physical consequences when their infection became known to others. | |
| Lichtenstein (2006). | This paper examines the links between HIV risk and domestic violence in women in a region with the highest HIV/AIDS rates in the United States. | 50 HIV positive women with IPV history was recruited from HIV clinic in Alabama | Cross-sectional design: Qualitative interview Abuse defined as a pattern of physical sexual and psychological abuse by a person with whom the victim has an intimate relationship. | 64 percent said IPV was ever a barrier getting care. Themes included sexual slavery and confinement, surveillance and stalking, depressed, helplessness, fearfull non disclosure. | As the study is qualitative in nature so it is not generalizible to the population of women living with HIV/AIDS. |

| Author (Year) | Aim | Study Sample | Method | Result | Limitation of the study |
|---|---|---|---|---|---|
| Sareen, Pagura, & Grant (2009) | The aim of the study is to examine the association between intimate partner violence (IPV) and human immunodeficiency virus (HIV) infection among a large representative sample of US women. | 13,928 women who reported being in a relationship in the last year and were 20 years and above. | Cross-sectional study design: National Epidemiologic Survey on Alcohol and Related Conditions was used. | Past year IPV and HIV prevalence estimates among women in romantic relationships in the United States were 5.5% and 0.17%, respectively. Adjusting for socio-demographic factors and risky sexual behaviors IPV was significantly associated with HIV infection (adjusted odds ratios=3.44, 95% confidence interval=1.28–9.22). We also found that 11.8% of the cases of HIV infection among women were attributable to past year IPV. | Assessment of IPV was based only on a past year time frame and not assessed over the participant's lifetime the present study was limited by self-report assessment of HIV status. |
| Teitelman, Ratcliffe, Dichter, & Sullivan (2008) | To examine the associations between past intimate partner abuse experienced during adolescence (verbal and physical), recent intimate partner abuse (verbal, physical, and sexual), and HIV risk (as indicated by lack of condom use) for sexually active young adult women in relationships with male partners. | 2,058 sexually active young adult women. | Secondary data analysis of waves II and III of the National Longitudinal Study of Adolescent Health (Add Health), The Add Health Study is a longitudinal, in-home survey of a nationally representative sample of adolescents. | Physical and verbal abuse experienced in adolescence were associated with physical/verbal abuse experienced in young adulthood. Young, sexually active women experiencing no abuse in their relationships were more likely to consistently use condoms in the past 12 months than were their abused counterparts. | Questions about abuse were not consistent overtime. At wave2respondents were not asked specifically about sexual abuse. The wave 3 questions did ask about sexual abuse but did not separate out physical abuse from verbal abuse. The use of secondary data, made it unclear whether they were talking about recent abuse or current abuse. |

| Author (Year) | Aim | Study Sample | Method | Result | Limitation of the study |
|---|---|---|---|---|---|
| Wingood et al. (2000) | To examine the health consequences of physical and sexual abuse among women. | 203 women who have been physically, sexually or emotionally abused in the past 60 day recruited for the shelters in Alabama. | Cross-sectional study design was used. Standardized survey was used to measure the physical, sexual and emotional abuse experienced by women. | Women experiencing both sexual and physical abuse were more likely to have a history of multiple sexually transmitted diseases (STDs) in their abusive relationships, have had an STD in the past 2 months, be worried about being infected with HIV, use marijuana and alcohol to cope, attempt suicide, feel as though they had no control in their relationships, experience more episodes of physical abuse in the past 2 months, rate their abuse as more severe, and be physically threatened by their partner when they asked that condoms be used. | Since the cross-sectional study design was used there the result cannot be generalized. |
| Zierler et.al. (2000) | This study estimated the proportion of HIV-infected adults who have been assaulted by a partner or someone important to them since their HIV diagnosis and the extent to which they reported HIV sero-positive status as a cause of the violence. | 2864 HIV-infected adults who were receiving medical care and were enrolled in the HIV Costs and Service Utilization Study. | All interviews (91% in person, 9% by telephone) were conducted with computer-assisted personal interviewing instruments. Interviews began in January 1996 and ended 15 months later. | Overall, 20.5% of the women, 11.5% of the men who reported having sex with men, and 7.5% of the heterosexual men reported physical harm since diagnosis, of whom nearly half reported HIV sero-positive status as a cause of violent episodes. | Detailed information on frequency and severity of violent episodes after disclosure of HIV status was not reported. |

REFERENCES

Ackerson, L. K., Kawachi, I., Barbeau, M, E., & Subramanian, V. S. (2008). Effects of individual and proximate educational context on intimate partner violence: A population-based study of women in India. *American Journal of Public Health, 98*(3), 507–514. doi: 10.2105/AJPH.2007.113738

Afifi, T. O., Macmillan, H., Cox, B. J., Asmundson, G. J., Stein, M. B., & Sareen, J. (2008). Mental health correlates of intimate partner violence in marital relationships in a nationally representative sample of males and females. *Journal of Interpersonal Violence, 24*(8), 1398-1417. doi: 10.1177/0886260508322192

Akeroyd, A. V. (1997). Sociocultural aspects of AIDS in Africa: occupational and gender issues. in Bond, G. C., Kreniske , J., Susser, I., & Vincent, J. (eds.). *AIDS in Africa and the Caribbean*. Westview, Oxford

Alaggia, R. & Vine, C. (2006). *Cruel but not unusual: Violence in Canadian families.* Wilfrid Laurier University Press. Waterloo, ON.

Allen, C. M., & Straus, M. A. (1980). Resources, power, and husband-wife violence. In M. A. Straus & G. T. Hotaling (Eds.), The social causes of husband-wife violence (pp. 188-208). University of Minnesota Press, Minneapolis.

Allison, Paul D. (1999). *Multiple Regression*. Thousand Oaks, CA: Pine Forge Press

Armistead, L., Morse, E., Forehand, R., Morse, P., & Clark, L. (1999). African–American women and self-disclosure of HIV-infection: Rates, predictors, and relationship to depressive symptomatology. *AIDS and Behavior, 3,* 195–204. doi:10.1023/A:1025400410099.

Asbury, J. (1987). African-American women in violent relationships: An exploration of cultural differences. *In Violence in the black family: Correlates and consequences*, Robert, H. (eds.). 89-105, Lexington Books, Lexington, MA.

Astin, M. C., Lawrence, K. J., & Foy, D. W. (1993). Posttraumatic stress disorder among battered women: risk and resiliency factors. *Violence and Victims, 8*(1), 17-28.

Avins, A., Woods, W., Lindan, C., Hudes, E., Clark, W., & Hulley, S. (1994). HIV infection and risk behaviors among heterosexuals in alcohol treatment programs. *Journal of the American Medical Association, 271*(7), 515– 518. doi:10.1001/jama.1994.03510310045036

Bandura, A. (1992). A social cognitive approach to the exercise of control over AIDS infection. In: DiClemente, R. J, (eds.). *Adolescents and AIDS: A generation in jeopardy*. 89-116, Sage, Newbury Park, California.

Baumgartner, M. P. (1993). Violent networks: The origins and management of domestic conflict, pp. 209–31 in R. B. Felson., & Tedeschi, T. J. (eds) *Aggression and Violence: Social Interactionist Perspectives.* American Psychological Association. Washington DC.

Beadnell, B., Baker, S. A., & Morrison, D. M. (2000). HIV/STD risk factors for women with violent male partner. *Sex Roles, 42*(7-8), 661-689. doi: 10.1023/A:1007003623810

Benson, M., Fox, G., DeMaris, A., & Van Wyk, J. (2003). Neighborhood disadvantage, individual economic distress and violence against women in intimate relationships. *Journal of Quantitative Criminology, 19*(3)*,* 207-235. doi: 10.1023/A:1024930208331

Benson, M. L., & Fox, G. L. (2004). *When violence hits home: How economics and neighborhood play a role* (National Institute of Justice Research in Brief No. 205004). Washington, D C: National Institute of Justice.

Black, D. (1990). *The Elementary Forms of Conflict Management. New Directions in the Study of Justice, Law, and Social Control*, prepared by the School of Justice Studies, Arizona State University. New York: Plenum Press.

Blake, S., Ledsky, R., Goodenow, C., Sawyer, R., Lohrmann, D., & Windsor, R. (2003). Condom availability programs in Massachusetts high schools: Relationships with condom use and sexual behavior. *American Journal of Public Health, 93*(6), 955-62. doi:10.2105/AJPH.93.6.955

Blower, S. M., Schwartz, E. J., Mills, J. (2003). Forecasting the future of HIV epidemics: the impact of antiretroviral therapies and imperfect vaccines. *AIDS Reviews, 5*(2), 113-125.

Bonomi, A. E., Thompson, R. S., Anderson, M. L., Reid, R. J., Dimer, J. A., & Carrell, D., et al (2006). Intimate partner violence and women's physical, mental, and social functioning. *American Journal of Preventive Medicine, 30*, 458-466. doi:10.1016/j.amepre.2006.01.015

Bograd, M. (1988). Feminist perspectives on wife abuse: An introduction. In M. Bograd & K. Yllo (Eds.), *Feminist perspectives on wife abuse* (pp. 11-26). Sage, Beverly Hills.

Bourdieu, P. (1986). The Forms of Capital. In Handbook of *Theory and Research for the Sociology of Education.* Ed. by John G. Richardson. New York: Greenwood Press.

Boy, A., & Kulczycki, A. (2008).What we know about intimate partner violence in the Middle East and North Africa. *Violence against Women, 14*(1), 53–70. doi: 10.1177/1077801207311860

Boyle, M. H., Georgiades, K., Cullen, J., Racine, Y. (2009). Community influences on intimate partner violence in India: women's education, attitudes towards mistreatment and standards of living. *Social Science and Medicine, 69*(5), 691–697. doi:10.1016/j.socscimed.2009.06.039

Brewin, C. R., Andrews, B. & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology, 68,* 748-766. doi:10.1037//0022-006X.68.5.748

Brock, K. (2003). When men murder women: An analysis of 2001 homicide data: Females murdered by males in single victim/single offender incidents. *Violence Policy Center.* Washington, DC: Retrieved December 24, 2010, from www.vpc.org/graphics/WMMW03.pdf

Brooks-Gunn, J. (2004). Intervention and policy as change agents for young children. In P. L. Chase-Lansdale, K. Kiernan, & R. J. Friedman (Eds.), *Human development across lives and generations: The potential for change* (pp. 293–340). New York: Cambridge University Press.

Brown, J. (1997). Working toward freedom from violence: The process of change in battered women. *Violence against Women, 3*(1), 5-26. doi: 10.1177/1077801297003001002

Brown, R.L. & Rounds, L.A. (1995). Conjoint screening questionnaires for alcohol and other drug abuse: Criterion validity in a primary care practice*. Wisconsin Medical Journal,9,* 135-140.

Browning, R. C., Leventhal, T., & Brooks-Gunn, J. (2004). Neighborhood context and racial differences in early adolescent sexual activity. *Demography, 41*(4), 607-720. doi:10.1353/dem.2004.0029

Brownridge, D. A., & Halli, S. S. (2000). Living in sin and sinful living: Toward filling a gap in the explanation of violence against women. *Aggression and Violent Behavior, 5*(6), 565–583. doi:10.1016/S1359-1789(99)000038

Bureau of Justice Statistics. (2005). *Crime victimization in the United States, 2005 Statistical Tables.* Bureau of Justice Statistics, U.S. Department of Justice. Washington D.C. U.S. Government Printing Press (NCJ 215244).

Bureau of Justice Statistics. (2006). *Intimate Partner Violence in the U.S. 1993-2004*. U.S. Department of Justice Washington D.C. U.S. Government Printing Press.

Bureau of Justice Statistics. (2006a). *Drug use and dependence, State and Federal. Prisoners, 2004.* Bureau of Justice Statistics. U.S. Department of Justice Washington D.C. U.S. Government Printing Press (NCJ-213530).

Bureau of Justice Statistics (2006b). *Prisoners in 2005. Bureau of Justice Statistics. U.S.* Department of Justice Washington D.C. U.S. Government Printing Press (NCJ-215092).

Caetano, R., Field, G. A., Ramisetty-Mikler, S. & McGrath, C. (2005). The 5-year course of intimate partner violence among white, black and hispanic couples in the United States. *Journal of Interpersonal Violence, 20*(9), 1039-105. doi: 10.1177/0886260505277783

Callahan, J. (1993). The Contract Motherhood Debate. *Journal of Clinical Ethics, 4*(1), 82-91.

Campbell, J. C. (2002). Health consequences of intimate partner violence. *Lancet, 359*(9314), 1331-1336. doi:10.1016/S0140-6736(02)08336-8

Campbell, J., Jones, A. S., Dienemann, J., Kub, J., Schollenberger, J., O'Campo, P., et al. (2002). Intimate partner violence and physical health consequences. *Archives of Internal Medicine, 162*(10), 1157-1163. doi:10.1001/archinte.162.10.1157

Campbell, J., & Lewandowski, L. A. (1997). Mental and physical health effects of intimate partner violence on women and children. *Psychiatric Clinics of North America, 20*(2), 353-374. doi:10.1016/S0193-953X(05)70317-8

Caplan, G. (1974). *Support systems and community mental health.* New York: Behavioral Publications.

Carlson, E. B., McNutt, A. L., Choi, Y. D., Rose, M. I. (2002). Intimate partner abuse and mental health: The role of social support and other protective factors. *Violence Against Women, 8*(6), 720-745. doi: 10.1177/10778010222183251

Cassel, J. (1974). Psychosocial Processes and Stress: Theoretical Formulations. International *Journal of Health Services, 4*,471-482.

Castano, E., Leidner, B., & Slawuta, P. (2008). Social identification processes, group dynamics and the behavior of combatants. *International review of the Red Cross, 90*(2), 1-13.

Cazenave, A. & Straus.M. (1995). Race, Class, Network Embeddedness, And Family Violence: A Search for Potent Support Systems. in *Physical Violence in American Families: Risk Factors and Adaptations to Violence in 8,145 Families*. Editied By Murray A. Straus and Richard J. Gelles. New Brunswick: Transaction Publishers.

Cazenave, N. A., and Straus, M. A. (1990). Race, class, network embeddedness. and family violence: A search for potent support systems. In Straus, M. A., and Gelles, R. J. (eds.), *Physical Violence in American Families*, 321-339. Transaction Publishers, New Brunswick, NJ.

Centers for Disease Control and Prevention (2012). Understanding Intimate Partner Violence. Facesheet 2012. CDC, National Center for Injury Prevention and Control. Available from: URL: http://www.cdc.gov/ViolencePrevention/pdf/IPV_factsheet-a.pdf

Centers for Disease Control and Prevention (2012). HIV in the United States: At A Glance. Department of Health and Human Service. Available from: URL: http://www.cdc.gov/hiv/resources/factsheets/us.htm

Centers for Disease Control and Prevention. (2011). *Diagnoses of HIV infection and AIDS in the United States and Dependent Areas, 2009*. Volume 21.

Centers for Disease Control and Prevention. (2009). *Understanding Intimate Partner Violence*. URL: http://www.cdc.gov/violenceprevention/pdf/IPV_factsheet.pdf.

Centers for Disease Control & Prevention (2007). *HIV/AIDS among women*. URL: http://www.cdc.gov/hiv/topics/women/resources/factsheets/women.htm

Centers for Disease Control & Prevention (2007). *Intimate partner violence: Fact sheet*. URL: from http://www.cdc.gov/ncipc/factsheets/ipvfacts.htm

Centers for Disease Control and Prevention (2007). *HIV/AIDS surveillance report*, 2005.Revised ed., 17. Atlanta, GA: Author. URL: http://www.cdc.gov/hiv/topics/surveillance/resources/reports/2005report/default.htm

Center for Disease Control, MMWR (2007). *Racial/Ethnic Disparities in Diagnoses of HIV/AIDS, 33 States, 2001—2005.* URL: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5609a1.htm.

Centers for Disease Control and Prevention. (2005). *HIVAIDS surveillance report, 2004* (Vol.16). Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. URL: http://www.cdc.gov/hif/topics/surveillance/resources/reports/2004.

Chase, K. A., O'Farrell, T. J., Murphy, C. M., Fals-Stewart, W., & Murphy, M. (2003). Factors associated with partner violence among female alcoholic patients and their male partners. *Journal of Studies on Alcohol, 64*(1), 137-149.

Chermack, S. T., Fuller, B. E., & Blow, F.C. (2000). Predictors of expressed partner and non-partner violence among patients in substance abuse treatment. Drug Alcohol Dependent 58(1-2), 43-54. doi:10.1016/S0376-8716(99)00067-8

Chodorow, N. (1989). *Feminism and psychoanalytic theory.* Yale University Press, New Haven.

Ciesla, J. A., Roberts, J. E. (2001). A meta-analysis of risk for major depressive disorder among HIV-positive individuals. *American Journal of Psychiatry,158*(5), 725–730

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38*(5), 300-314.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159.

Cohen, D. & Prusak, L. (2001). *In good company. How social capital makes organizations work.* Boston, MA, Harvard Busuness School Press.

Cohen, S, & McKay, G. (1984). Social support, stress, and the buffering hypothesis An empirical review In A Baum, J E Singer, & S E Taylor (Eds), *Handbook of psychology and health* (Vol 4, pp 253-267) Hillsdale, NJ Erlbaum.

Coker, A. L., Flerx, V. C., Smith, P. H., et al. (2007). Partner violence screening in rural health care clinics. *American Journal of Public Health, 97*(7), 1319-1325.

Coker, A. L., Davis, K. E., Arias, I., Desai, S., Sanderson, M., Whitaker, J. D., Fadden, K. M., et al. (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of Preventive Medicine, 24*(4), 260–268. doi: 10.2105/AJPH.2005.085357

Coker, A. L., Smith, P. H., Bethea, L., King, M. R., & McKeown, R. E. (2000). Physical health consequences of physical and psychological intimate partner violence. *Archives of Family Medicine, 9*(5), 451- 457.

Coker, A. L., Smith, P. H., McKeown, R. E., & King, M. J. (2000). Frequency and correlates of intimate partner violence by type: Physical, sexual, and psychological battering. *American Journal of Public Health, 90(4)*, 553-559.

Coker, A. L., Watkins, K.W., Smith, P. H., & Brandt, H. M. (2003) Social support reduces the impact of partner violence on health: Application of structural equation models. Preventive Medicine, 37(3), 259 -267. doi:10.1016/S0091-7435(03)00122-1

Coleman, J. (1988). Social Capital in the Creation of Human Capital. American Journal of Sociology Supplement, 94, S95-S120. doi: 10.2307/2780243.

Collins, P. H. (1991). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. Routledge, London.

Collins, J. J., & Messerschmidt, P. M. (1993). Epidemiology of alcohol-realted violence. *Alcohol Health and Research World, 17*(2), 93-100.

Collier-Tenison, S. (2003). Economic factors in intimate partner conflict and violence. *Social Development Issues*, 25(1/2), 247-261.

Connell, R. W. (1995). *Masculinities.* University of California Press.

Connell, R. W. (1987). *Gender and power: Society, the person, and sexual politics*. Stanford University Press, Stanford, CA.

Cooney, M. (1998). *Warrior and peacemakers*. New York University Press, New York.

Cooper, M. (2002). Alcohol use and risky sexual behavior among college students and youth: Evaluating the evidence. *Journal of Studies on Alcoho*l, (Suppl. 14), 101–117.

Corrigan, J. D., Wolfe, M., Mysiw, W. J., Jackson, R. D., & Bogner, J. (2003). Early identification of mild traumatic brain injury in female victims of domestic violence. *American Journal of Obstetrics & Gynecology, 188*(5 Suppl), 71-76.

Council of Economic Advisers. (1998). *Explaining Trends in the Gender Wage Gap*.CEA White Paper.

Crenshaw, K. W. (1994). Mapping the margins: Intersectionality, identity politics, and violence against women of color. In M. A. Fineman & R. Mykitiuk (Eds.), *The public nature of private violence: The discovery of domestic abuse* (pp. 93-118). Routledge, New York.

Crowell, N.A., & Burgess, A.W. (1996). *Understanding violence against women*. National Academy Press, Washington, D.C.

Cubbin, C., Santelli, J., Brindis, D. C., & Braveman, P. (2005). Neighborhood context and sexual behaviors among adolescents: Findings from the national longitudinal study of adolescent health. *Perspectives on Sexual and Reproductive Health, 37*(3), 125-134. doi: 10.1363/3712505

Cunradi ,C. B., Caetano, R., Schafer. (2002). Alcohol-related problems, drug use, and male intimate partner violence severity among US couples. *Alcoholism: Clinical and Experimental Research, 26*(4), 493-500. doi: 10.1111/j.1530-0277.2002.tb02566

Curtis, R., & Patrick, D. (1993). Race and survival time with AIDS: A synthesis of the literature. *American Journal of Public Health, 83*(10), 1425-1428.

Dahlberg, L. L. & Krug, G. E. (2002). Violence – a global public health problem. In, Dahlbergl, E. K., Meray J. A & Zwi, B. A., Lozano R (eds.) World Report on violence and health. WHO, 1-56. Geneva, Switzerland.

Danis, F. (2003). The criminalization of domestic violence; what social workers need to know. *Social Work, 48* (2), 237-246.

Davis, K., Taylor, B., & Furniss, D. (2001). Narrative accounts of tracking the rural domestic violence survivors' journey: A feminist approach. *Health Care for Women International, 22*(4), 333-347. doi: 10.1080/07399330152398882.

Decker, C. F. & Lazarus, A. (2000). Tuberculosis and HIV infection. How to safely treat both disorders concurrently. *Postgraduate Medicine,108* (2), 57-60, 65-68.

Denham, A. C., Frasier, P. Y., Hooten, E, G., Belton, L., Newton, W., & Gonzalez, P., Begum, M. (2007). Intimate partner violence among latinas in eastern North Carolina. Violence against Women, 13(2), 123–40. doi: 10.1177/1077801206296983

Department of Justice, Bureau of Justice Statistics (2012). Intimate partner violence [online]. [cited 2011 Jan 07]. Available from URL: http://bjs.ojp.usdoj.gov/index.cfm?ty=tp&tid=971#summary.

Dermen, K. H., Cooper, M. L. (2000). Inhibition conflict and alcohol expectancy as moderators of alcohol's relationship to condom use. *Experimental and Clinical Psychopharmacology, 8*(2), 198-206.

Diop-Sidibe, N. (2001). Domestic violence against women in Egypt: Risk factors and health outcomes of wife-beating in Egypt. *Dissertation,* Department of Population Dynamics, Johns Hopkins University.

Dobash, R. P & Dobash, R. E. (1979). *Violence against wives: a case against the partiarchy.* New York .

Drucilla, C. (1998). *At the heart of freedom: feminism, sex, and equality*. Princeton University Press, Princeton, N.J.

Echols, A. (1989). *Daring to be bad: radical feminism in America, 1967-1975*. University of Minnesota Press, Minneapolis.

Echols, A., & Willis, E. (1990). *Daring to Be Bad: Radical Feminism in America, 1967-1975*.

Edwards, L. V. (2006). Perceived social support and HIV/AIDS medication adherence among African American women. *Qualitative Health Research, 16*(5), 679-691. doi:10.1177/1049732305281597.

Eisikovits, Z. (1996). The aftermath of wife beating: Strategies of bounding violent events. *Journal of Interpersonal Violence, 11*(4), 459-474. doi: 10.1177/088626096011004001

El-Bassel, N., Gilbert, L., Wu, E., Go, H., & Hill, J. (2005). HIV and intimate partner violence among methadone-maintained women in New York City. *Social Science & Medicine, 61*(1), 171-183. doi:10.1016/j.socscimed.2004.11.035

Ellis, L. (1989). *Theories of rape: Inquiries into the causes of sexual aggression*. New York: Hemisphere.

Ellison, C. G., & Anderson, L. K. (2001). Religious involvement and domestic violence among U.S. couples. *Journal for the Scientific Study of Religion, 40*(2), 269-286. doi:10.1111/0021-8294.00055/pdf

Ewing, W., Lindsey, M., & Pomerantz, J. (1984). *Battering: An amend manual for helpers. Abusive Men Exploring New Directions*, Denver.

Fals-Stewart, W. (2003). The occurrence of partner physical aggression on days of alcohol consumption: A longitudinal diary study. *Journal of Consulting and Clinical Psychology, 71*(1), 41-52. doi:10.1037//0022-006X.71.1.41

Farmer, P., Leandre, F., Mukherjee, J., Gupta, R., Tarter, L., & Kim, J. Y. (2001). Community-based treatment of advanced HIV disease: Introducing DOT-HAART (directly observed therapy with highly active antiretroviral therapy). *Bulletin of World Health Organization, 79*(12), 1145–1151.

Fehringer, J., & Hindin, M. J. (2009). Like parent, like child: Intergenerational transmission of violence in Cebu, the Philippines. *Journal of Adolescent Health, 4*(44), 363-371. doi:10.1016/j.jadohealth.2008.08.012

Feldman, D. A. (1990). *Assessing Viral, parasitic, and socioeconomic cofactors affecting HIV Transmission in Rwanda*. Praeger., Fenner, F., & Feldman, D. A. (eds.), 45-54. New York.

Ferreira, A., & Mallol, S. (1994). Training health agents for prevention in urban low socioeconomic status women. *International Conference on AIDS, 10*(1), 328.

Flake, D. F. (2005). Individual, family, and community risk markers for domestic violence in Peru. *Violence Against Women,11*(3), 353–373.doi: 10.1177/1077801204272129

Freedman, J. (2001). *Feminism.* Open University, Buckingham.

Flexner, E., & Fitzpatrick, E. (1996). *Century of struggle. The woman's rights movement in the United States*. Cambridge, MA: The Belknap Press of Harvard University Press. (Original work published 1959).

Fromme, K., D'Amico, E. J., & Katz, E. C. (1999). Intoxicated sexual risk taking: An expectancy or cognitive impairment explanation? *Journal of Studies on Alcohol, 60*(1), 54−63.

Fowler, D. N., & Hill, H. N. (2004). Social support and spirituality as culturally relevant factors in coping among African American women survivors of partner abuse. *Violence against Women, 10*(11), 1267–1282. doi: 10.1177/1077801204269001

Fox, G. L., Benson, M. L., DeMaris, A. A., & Van Wyck (2002). Economic distress and intimate violence: Testing family stress and resources theories. *Journal of Marriage and the Family, 64*(3), 793-807. doi:10.1111/j.1741-3737.2002.00793

Fox J. A., & Zawitz, M.W. (2007). Homicide trends in the United States. U.S. Department of Justice, Bureau of Justice Statistics. July 11, 2007 [online] http://www.ojp.usdoj.gov/bjs/homicide/homtrnd.html accessed 02/17/09

Garcia-Moreno, C., & Watts, C. (2000). Violence against women: its importance for HIV/AIDS. *AIDS, 14* (3), 253–265.

Gartner, R. B. (1999). *Betrayed as boys: Psychodynamic treatment of sexually abused men.* Guilford Press, New York.

Gelles, R. J. (1985). Family violence. *Annual Review of Sociology 11*, 347-367.

Gelles, R. J., & Cornell, C. P. (1990). *Intimate violence in families* (2nd ed.). New York: Sage.

George, W. H., Stoner, S. A., Norris, J., Lopez, P. A., & Lehman, G. L. (2000). Alcohol expectancies and sexuality: A self-fulfilling prophecy analysis of dyadic perceptions and behavior. *Journal of Studies on Alcohol, 61*(1), 168-176.

Gielen, A. C., Fogarty, L., O'Campo, P., Anderson, J., Keller, J., & Faden, R. (2000a). Women living with HIV: Disclosure, violence, and social support. *Journal of Urban Health, 77(3)*, 480-491. doi:10.1007/BF02386755.

Gielen, A. C., McDonnell, K. A., Burke, J. G., & O'Campo, P. (2000b). Women's lives after an HIV-positive diagnosis: Disclosure and violence. *Maternal and Child Health Journal, 4*(2), 111–120. doi:10.1023/A:1009522321240.

Gielen, A. C., McDonnell, K. A., O'Campo, P., & Burke, J. G. (2005). Suicide risk and mental health indicators: Do they differ by abuse and HIV status? *Women's Health Issues, 15*(2), 89-95. doi:10.1016/j.whi.2004.12.004

Gil, D. G. (1996). Preventing violence in a structurally violent society: Mission impossible. *American Journal of Orthopsychiatry, 66*(1), 77-84. doi:10.1037/h0080157

Gilligan, C. (1977). In a Different Voice: Women's Conceptions of Self and Morality. *Harvard Educational Review, 47* (4): 481-517.

Glass, T. A., Dym, B., Greenberg, S., Rintell, D., Roesch, C., & Berkman, L. F. (2000). Psychosocial intervention in stroke: The Families in Recovery from Stroke Trial (FIRST). American. *Journal of Orthopsychiatry, 70*, 169–181.

Goode, W. (1971). Force and Violence in the Family. *Journal of Marriage and the Family, 33*

(4), 624–36. doi:10.2307/349435. JSTOR 10.2307/349435.

Goodman, L., Dutton, M. A., Vankos, N., & Weinfurt, K. (2005). Women's resources and use of strategies as risk and protective factors for re-abuse over time. *Violence Against Women, 11*, 311-336.

Goodwin, S.N., Chandler, S., & Meisel, J. (2003). Violence against women: the role of welfare reform. *Final report to the National Institute of Justice*, NCJ 205792.

Greener, R. (2002). AIDS and macro-economic impact. State of the Art: AIDS and Economics. Special series prepared for the International AIDS Economics Network, Barcelona Symposium, http://www.iaen.org/conferences/stateofepidemic.php. (Retrieved on 10 June, 2009).

Greenfield, L. A., Rand, M. R., Craven, D., Klaus, P. A., Perkins, C.A., Ringel, C., et al. (1998). *Violence by intimates: Analysis of data on crimes by current and former spouses, boyfriends, and girlfriends*. U.S. Department of Justice, Bureau of Justice Statistics. Washington, DC.

Greeley, Alexandra. (1995). Concern about AIDS in minority communities. *FDA Consumer, 29*(10), 11.

Hanifan, L. J. (1916). The rural school community center, Annals of the American Academy of *Political and Social Science, 67*,130-138.

Hanifan, L. J. (1920). The Community Center, Boston: Silver Burdett.

Harpham, T., Grant, E., & Thomas, E. (2002). Measuring social capital within health surveys: Key issues. Health Policy and Planning, 17(1), 106–11.

Haithcox, J. M. (2009). *Social support experiences of HIV positive HIV/AIDS coalition participants: A grounded theory approach*. Dissertation

Hawkes, S., Santhya, K. G. (2002). Diverse realities: sexually transmitted infections and HIV in India. *Sexually Transmitted Infections, 78*, 31-39. doi:10.1136/sti.78.suppl_1.

Hellerstedt, W. L., Peterson-Hickey, M., Rhodes, K. L., & Garwick, A. (2006). Environmental, social, and personal correlates of having ever had sexual intercourse among American Indian youths. *American Journal of Public Health, 96*(12), 2228-2232. doi:10.2105/AJPH.2004.053454

Herek, G. M., & Capitanio, J. P. (1999). AIDS stigma and sexual prejudice. *American Behavioral Scientist, 42*(7), 1130–1147. doi: 10.1177/0002764299042007006

Herzog, S. (2007). An empirical test of feminist theory: The impact of different types of sexism on perceived seriousness of male violence against women. *Journal of Feminist Criminology, 2* (3), 223-244. doi: 10.1177/1557085107301836

Hoff, L. A. (1990). *Battered women as survivors*. Routledge, London.

Hoffman, L. K., Demo, H. D., & Edwards, N. J. (1994). Physical wife abuse in a non-western society: An integrated theoretical approach. *Journal of Marriage and the Family, 56*(1), 131-46.

Holtgrave, D. R., Crosby, R. A. (2003). Social capital, poverty, and income inequality as predictors of gonorrhoea, syphilis, chlamydia and AIDS cases rates in the United States. *Sexually Transmitted Infections, 79*:62-4. doi:10.1136/sti.79.1.62

Holmes, C. B., Losina, E., Walensky, R. P., Yazdanpanah, Y. & Freedberg, K. A. (2003). Review of human immunodeficiency virus type-1-related opportunistic infections in Sub-Saharan Africa. *Clinical Infectious Diseases, 36*(5), 652–662. doi:10.1086/367655

Hornung, A. C., McCullough, B. C., & Sugimoto, T. (1981). Status relationships in marriage: risk factors in spouse abuse. *Journal of Marriage and the Family, 43*(3), 675-92.

House, J. S. (1981). *Work, Stress and Social Support*. Addison-Wesley. Reading, MA.

Hunnicutt, G. (2009). Varieties of patriarchy and violence against women resurrecting "patriarchy" as a theoretical tool. *Violence against women, 15*(5), 553-573. doi:10.1177/1077801208331246.

ICW (2004e) Participation and Policy Making: Our Rights, ICW vision paper 5. http://www.icw.org/tiki-download_file.php?fileId=61.

Jewkes, R. (2002). Intimate partner violence: Causes and prevention. *The Lancet, 359*(9315), 1423-1429. doi: 10.1016/S0140-6736(02)08357-5

Johnson, K. B., & Das, M. B. (2009). Spousal violence in Bangladesh as reported by men: Prevalence and risk factors. *Journal of Interpersonal Violence, 24*(6), 977–995. doi:10.1177/0886260508319368

Joint United Nations Programme on HIV/AIDS [UNAIDS], (2011). *UNAIDS World AIDS day report 2011*. Available from: URL: http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/JC2216_WorldAIDSday_report_2011_en.pdf

Joint United Nation Program for HIV/AIDS. (2008). *Report on the Global AIDS Epidemic*.

Joint United Nations Programme on HIV/AIDS. (2004). 2004 Report on the global AIDS epidemic. http://img.thebody.com/unaids/pdfs/unaids_report_summary2004.pdf

Justus, A. N., Finn, P. R., & Steinmetz, J. E. (2000). The influence of traits of disinhibition on the association between alcohol use and risky sexual behavior. *Alcoholism, Clinical and Experimental Research, 24*(7), 1028–1035. doi: 10.1111/j.1530-0277.2000.tb04646

Kaiser Family Foundation/UNAIDS. (2007). Financing *the Response to AIDS in Low and Middle-Income Countries: International Assistance from the G8*, European Commission and Other Donor Governments.

Kaiser Family Foundation. (2002). *National survey on the public's attitudes towards HIV/AIDS in the US and the world.* Kaiser Family Foundation, Menlo Park, CA.

Kalichman, S. C., & Nachimson, D. (1999). Self-Efficacy and Disclosure of HIV-positive Serostatus to Sex Partners. *Health Psychology, 18*, 281–287.

Kantor, G. K. (1997). Alcohol and spouse abuse ethnic differences. *Recent Developments in Alcoholism, 13*, 57-79.

Kantor, G. K., Asdigian, N. (1997). When women are under the influence. Does drinking or drug use by women provoke beatings by men? *Recent Developments in Alcoholism, 13*, 315-336.

Karon, J. M., Fleming, P. L., Steketee R.W., De Cock, K. M. (2001). HIV in the United States at the turn of the century: an epidemic in transition. American Journal of Public Health, 91, 1060–68.

Kernic, M. A., Wolf, M. E., & Holt, V. L. (2000). Rates and relative risk of hospital admission among women in violent intimate partner relationships. *American Journal of Public Health, 90*(9), 1416-1420.

Kenney, C.T., & McLanahan, S. (2006). Why are cohabiting relationships more violent than marriages? *Demography, 43*(1), 127-140. doi: 10.1353/dem.2006.0007

Kocot, G., & Goodman, L. (2003). The roles of coping and social support in battered women's mental health. *Violence against Women, 9*(3), 323–346. doi: 10.1177/1077801202250075

Krishnan, S. (2005). Do structural inequalities contribute to marital violence? Ethnographic evidence from rural South India. *Violence against women, 11*(6), 759–75. doi: 10.1177/1077801205276078

Krishna, A., & Uphoff, N. (1999). Mapping and Measuring Social Capital: A Conceptual and Empirical Study of Collective Action for Conserving and Developing Watersheds in Rajasthan, India. *Social Capital Initiative Working Paper No. 13. World Bank*, Washington, D.C.

Land, H., Hudson, S. M., & Stiefel, B. (2003). Stress and depression among HIV-positive and HIV-negative gay and bisexual AIDS caregivers. *AIDS Behavior, 7*(1), 41–53. doi: 10.1023/A:1022509306761

Laub, J., & Sampson, R. J. (2001). Understanding desistance from crime. In M. H. Tonry (Eds.), *Crime and justice: A review of research* (pp. 1-69). University of Chicago Press. Chicago, IL.

Leigh, B. C. & Stall, R. (1993). Substance use and risky sexual behavior for exposure to HIV: Issues in methodology. *The American Psychologist, 48*(10), 1035-1045.

Lenton, R.L. (1995). Power versus feminist theories of wife abuse. *Canadian Journal of Criminology, 37*, 305-330.

Leonardson, R. G., Kemper, E., Ness, K. F., Koplin, A. B., Daniels, C. A., and Leonardson, A. G. (2005). Validity and reliability of the audit and Cage-Aid in Northern Plains American Indians. *Psychological reports, 97*(1), 161-166. doi: 10.2466/pr0.97.1. 161-166.

Leppäkoski, T., Paavilainen,E., & Kurki A.P. (2011). Experiences of emergency care by the women exposed to acute physical intimate partner violence from the Finnish perspective. I*nternational Emergency Nursing, 19*(1), 27-36. doi:10.1016/j.ienj.2010.02.006

Levendosky, A. A., Bogat, G. A., Theran, S. A., Trotter, J., Von-Eye, A., & Davidson, W. S. (2004). The social networks of women experiencing domestic violence. American *Journal of Community Psychology, 34*, 95–109.

Lichtenstein, B. (2005). Domestic violence, sexual ownership, and HIV risk in women in the American Deep South. *Social Science and Medicines*, *60*(4), 701-711. doi:10.1016/j.socscimed.2004.06.021

Lichtenstein, B. (2006). Domestic violence in barriers to health care for HIV-positive women. *AIDS Patient Care STDS*, *20*(2), 122-132.

Lockhart, L. & Danis, F.S. (2010). Domestic Violence: *Intersectionality and Culturally Competent Practice.* New York: Columbia University Press: Foundations of Social Work Knowledge Series.

Macy, M. G., Bricker, D. D., & Squires, J. K. (2005). Validity and reliability of a curriculum based assessment approach to determine eligibility for Part C services. *Journal of Early Intervention, 28*(1), 1–16.

MacEwen, K.E., & Barling, J. (1988). Multiple stressors, violence in the family of origin, and marital aggression: a longitudinal investigation. *Journal of Family Violence, 3*(1), 73–87. doi: 10.1007/BF00994667

Maman, S., Campbell, J., Sweat, M., & Gielen, A. (2000). The intersections of HIV and violence: Directions for future research and interventions. *Social Science and Medicine, 50*(4), 459-478. doi:10.1016/S0277-9536(99)00270-1

McCauley, J., Kern, D. E., Kolodner, K., Dill, L., Schroeder, A. F., DeChant, H. K., Ryden, J., & Bass, E. B., et al. (1995). The battering syndrome: Prevalence and clinical characteristics of domestic violence in primary care internal medicine practices. *Annals of Internal Medicine 123*(3), 737-746.

McDonnell, K. A., Gielen, A. C., O'Campo, P. (2003). Does HIV status make a difference in the experience of lifetime abuse? Descriptions of lifetime abuse and its context among low-income urban women. *Journal of Urban Health, 80* (3), 494–509. doi:10.1093/jurban/jtg047

MacMillan, R., & Gartner, R. (1999). When she brings home the bacon: labor-force participation and the risk of spousal violence against women. *Journal of Marriage and the Family 61*(4), 947-58.

Macmillan, R. & Kruttschnitt, C. (2005). Patterns of violence against women: Risk factors and consequences. U.S. Department of Justice, 2002-IJ-CX-0011, National Institute of Justice, NCJ 208346. Washington D.C.

Manfrin-Ledet, L., & Porche, D. J. (2003). The state of science: Violence and HIV infection in women. *Journal of the Association of Nurses in AIDS Care, 14*(6), 56–68.

Meadows, L. A., Kaslow, N. J., Thompson, M. P., Jurkovic, G. J. (2005). Protective factors against suicide attempt risk among African American women experiencing intimate partner violence. *American Journal of Community Psychology, 36* (1-2), 109-21. doi: 10.1007/s10464-005-6236-3

Mechanic, B, M. (2004). Beyond PTSD: Mental health consequences of violence against women: A response to Briere and Jordan. *Journal of Interpersonal Violence, 19*(11), 1283-1289. doi: 10.1177/0886260504270690

Meisel, J., Chandler, & Rienzi, M. B. (2003). Domestic violence prevalence and effects on employment in two California TANF populations. *Violence Against Women, 9*(10), 1191–1212. doi: 10.1177/1077801203255861

Metzger, D., Navaline, H., & Woody, G. (1998). Drug abuse treatment as AIDS prevention. *Public Health Reports, 113*(1),97–106.

Michal-Johnson, P., & Bowen, S. P. (1992). The place of culture in HIV education. In T. Edgar, M. Fitzpatrick, & V. Freimuth (Eds.), AIDS: A communication perspective, 147-172. Erlbaum, Mahwah, NJ.

Miller, J. B., & Stiver, I. P. (1997). *The healing connection: How women form relationships in therapy and in life.* Boston: Beacon Press.

Milton, S. (1986). A Sample Size Formula for Multiple Regression Studies. *Public Opinion Quarterly, 50*(1), 112–118.

Mitchell, S. (1988). *Relational Concepts in Psychoanalysis*. Harvard University Press. Cambridge, MA.

Mitchell, M. D., Hargrove, G. L., Collins, M. H., Thompson, M. P., Reddick, T. L., Kaslow, N. J. (2006). Coping variables that mediate the relation between intimate partner violence and mental health outcomes among low-income, African American women. *Journal of Clinical Psychology, 62*(12), 1503-20. doi: 10.1002/jclp.20305

Miranda, J., & Green, B.L. (1999). The need for mental health services research focusing on poor young women. *The Journal of Mental Health Policy and Economics, 2,* 73-80.

Moffitt, T.E. & Caspi, A. (1999). Findings about partner violence in the Dunedin multidisciplinary health & development study. *National Institute of Justice Research in Brief, US Department of Justice*.Washington, D.C.

Moreno, C. L., El-Bassel, N., Gilbert, L., & Wada, T. (2002). Correlates of poverty and partner abuse among women on methadone. *Violence Against Women, 8* (4), 455-475. doi: 10.1177/10778010222183161

Moore, D., Liechty, C., Ekwaru, P., et al. (2007). Prevalence, incidence and mortality associated with tuberculosis in HIV-infected patients initiating antiretroviral therapy in rural Uganda. *AIDS, 21*(6), 713-719. doi: 10.1097/QAD.0b013e328013f632

Morrison, M. F., Petitto, J., Have, T. T., Gettes, R. D., Chiappini, S. M., Weber, L. A., Brinker-Spence, P., et al. (2002). Depressive and anxiety disorders in women with HIV infection. *American Journal of Psychiatry, 159*, 789–796.

Muelleman, R. L., Lenaghan, P. A., & Pakieser, R. A. (1996). Battered women: injury locations and types. *Annual Emergency Medicine, 28*(5), 486-492. doi:10.1016/S0196-0644(96)70110-5

National Institute on Drug Abuse (2011). InfoFacts: Drug Abuse and the Link to HIV/AIDS and Other Infectious Diseases. http://www.drugabuse.gov/publications/infofacts/drug-abuse-link-to-hivaids-other-infectious-diseases.

O'Farrell, T. J., & Murphy, C. M. (1995). Marital violence before and after alcoholism treatment. *Journal of Consulting and Clinical Psychology, 63*(2), 256-262.

Onyx, J. & Bullen, P. (2000). Measuring social capital in five communities. *The Journal of Applied Behavioral Science, 36,* (1), 23-42.

Panchanadeswaran, S., Johnson, S. C., Sivaram, S., Srikrishnan, A. K., Latkin, C., Bentley, M. E. et al. (2008). Intimate partner violence is as important as client violence in increasing street- based female sex workers vulnerability to HIV in India. *International Journal of Drug Policy,19*, 106-112.

Pappas, G. (1994). Elucidating the relationship between race, socioeconomic status and health [Editorial]. *American Journal of Public Health, 84*(6), 892-893.

Paxton, S. & Welbourn, A. (with Kousalya, P., Yuvaraj, A., Pradhan Malla, S and M. Seko) (2004). *"Oh! This one is infected!" C*, Expert meeting on HIV/AIDS and Human Rights in Asia-Pacific, Bangkok, 23-24 March 2004.

Pence, E. and Dasgupta, S.D. (2006). *Re-examining battering: Are all acts of violence against intimate partners the same?* Praxis International, Inc.

Pence, E. & Paymar, M. (1993). Education Groups for Men who Batter: The Duluth Model, Springer, New York.

Perilla, J. L. (2009). *Religious teachings and domestic violence: From roadblock to resource.* Retrieved November 30, 2009, from www.faithtrustinstitute.org.

Petchesky,R. (1979). Dissolving the hypen: A report on Marxist-Feminist group 1-5 in Eisenstein. Z. (ed.) *Capitalist patriarchy and the case for socialist feminism.* New York: Monthly Review.

Pilcher, J., & Whelehan, I. (2004). *Fifty key concepts in gender studies.* Sage, London.

Piot, P., Bartos, M., Ghuys, P.D., Walker, N. & Schwartlander, B. (2001). The Global Impact of HIV/AIDS. *Nature, 410*.

Pirraglia, A. P., Bishop, D., Herman, S. D., Trisvan, E., Lopez, A. R., et al., (2005). Caregiver burden and depression among informal caregivers of HIV-infected individuals. *Journal of General Internal Medicine, 20*(6), 510-514. doi: 10.1111/j.1525-1497.2005.0073

Prachakul, W., & Grant, J.S. (2003). Informal caregivers of persons with HIV/AIDS: a review and analysis. *Journal of Association of Nurses in AIDS Care, 14*(3), 55-71. doi:10.1177/1055329003014003005

Putnam, R.D. (2000). *Bowling alone*. Simon & Shuster: New York

Rao, V. (1997). Wife-beating in Rural South India: A qualitative and econometric analysis. *Social Science and Medicine, 44*(8), 1169-1180.

Rennison, C. M., & Welchans, S. (2000). *Intimate partner violence: Bureau of justice statistics special report.* (NCJ 178247). Washington, DC: US Department of Justice.

Rose, L., Campbell, J., & Kub, J. (2000). The role of social support and family relationships in women's responses to battering. *Health Care for Women International, 21*(1), 27-39.

Rosenbaum, A. (1989). Head injury and marital aggression. *American Journal of Psychiatry, 146*, 1048- 1051.

Rosenthal, J.A. (2001). Statistics and data interpretation: For the helping professions. Brooks/Cole Thomson Learning, Belmont, CA.

Rothenberg, K. H., Paskey, S. J., Reuland, M. M., Zimmerman, S. I., & North, R. L. (1995). Domestic violence and partner notification: Implications for treatment and counseling of women with HIV. *Journal of American Medical Women's Association, 50*(3), 87-93.

Ruiz-Pérez, I., Mata-Pariente, N., & Pazaola-Castaño, J. (2006). Women's response to intimate partner violence. *Journal of Interpersonal Violence, 21*(9), 1156-67. doi: 10:1177/0886260506290421

Ruiz-Pérez I, Plazaola-Castaño J, Álvarez-Kindelan M, Palomo-Pinto M, Arnalte-Barrera M, Bonet-Pla A, et al. (2006). Socio-demographic associations of physical, emotional, and sexual intimate partner violence in Spanish women. *Annual Journal of Epidemiology16*, 357-63.

Rubin, A., & Babbie, E. R. (2008). Research Methods for Social Work (6th ed.). Thomson, Brooks/Cole, Belmont, CA.

Rubin, M. S., Colen, C. G., Link, B. G. (2010). Examination of inequalities in HIV/AIDS mortality in the United States from a fundamental cause perspective. *American Journal of Public Health, 100*(6), 1053–1059. doi: 10.2105/AJPH.2009.170241

Salazar, L. F., Wingood, G. M., DiClemente, R. J., Lang, D. L., & Harrington, K. (2004). The role of social support in the psychological well-being of African American girls who experience dating violence victimization. *Violence and Victims, 19*(2), 171-87.

Saltzman, L. E., Fanslow, J. L., McMahon, P. M., & Shelley, G. A. (2002). Intimate partner violence surveillance: uniform definitions and recommended data elements. *National Center for Injury Prevention and Control, Centers for Disease Control and Prevention,* Version 1.0. Atlanta.

Sampson, R. J., Laub, J. H., & Wimer, C. (2006). Does marriage reduce crime? A counterfactual approach to within-individual causal effects. *Criminology,44*, 465–508. doi:10.1111/j.1745-9125.2006.00055.x

Sareen, J., Pagura, J. & Grant, B. (2009). Is intimate partner violence associated with HIV infection among women in the United States? *General Hospital Psychiatry 31*, 274-278. doi:10.1016/j.genhosppsych.2009.02.004

Sauliner, F. C. (1996). *Feminist theories and social work, approaches and application*. The Haworth Press, New York.

Shacham, E., Small, E., Nur Onen., Stamm, K., & Overton, E. (2012). Serostatus Disclosure Among Adults with HIV in the Era of HIV Therapy. *AIDS Patient Care and STDs, 26*(1), 29-35.

Schechter, S. (1982). *Women and male violence: The visions and struggles of the battered women's movement.* South End, Boston.

Schoepf, B. G. (1995). Culture, sex research and AIDS prevention in Africa, 29-51 in Brummelhuis, H., & Herdt, G. (eds.). *Culture and sexual risk: anthropological perspectives on AIDS*. Gordon and Breach Science Publishers, Amsterdam, SA.

Schuler, S. R., Hashemi, S. M., Riley, A. P., & Akhter, S. (1996). Credit programs, patriarchy and men's violence against women in rural Bangladesh. *Social Science and Medicine, 43* (12), 1729-1742.

Schulz, J. A., & Mullings, L. (eds). (2006). *Gender, race, class, & health: Intersectional approaches.* Jossey-Bass, San Francisco.

Schumm, J. A., Hobfoll, S. E., Keogh, N. J. (2004). Revictimization and interpersonal resource loss predicts PTSD among women in substance use treatment. *Journal of Traumatic Stress, 17*, 173-181.

Schwartz, J. P., Hage, M. S., Bush, I., & Burns, K. L. (2006). Unhealthy parenting and potential mediators as contributing factors to future intimate violence: A review of the literature. *Trauma Violence & Abuse, 7*(3), 206–221. doi: 10.1177/1524838006288932

Simoni, M. J., Frick, A. P., Lockhart, D., & Liebovitz, D. (2002). Mediators of social support and antiretroviral adherence among an indigent population in New York City. *AIDS Patient Care and STDS, 16*(9), 431-439. doi:10.1089/108729102760330272

Smith, E. (2008). Domestic violence in pregnancy. *International Journal of Childbirth Education, 23*(3), 22-25.

Smith, P.K. (2003). *Violence in schools: The response in Europe*. Routledge, London & New York.

Smith, P.H., Thornton, G.E., DeVellis, R., Earp, J., & Coker, A.L. (2002). A population-based study of the prevalence and distinctiveness of battering, physical assault, and sexual assault in intimate relationships. *Violence Against Women, 8*(10), 1208-1232.

Solomon, S., Solomon, S.S., Ganesh. A.K. (2006). AIDS in India. *Postgraduate medical journal, 82*(971), 545 – 547. doi:10.1136/pgmj.2006.044966

Sorenson, S. B., & Telles, C. A. (1991). Self-reports of spousal violence in a Mexican-American and non-Hispanic white population. *Violence and Victims, 6*(1), 3-15.

Stall, R., Paul, J. P., Greenwood, G., Pollack, L. M., Bein, E., Crosby, G. M., Mill, T. C., et al. (2001). Alcohol use, drug use and alcohol-related problems among men who have sex with men: The urban men's health study. *Addiction, 96*(11), 1589–1601.

Starkman, N., & Rajani, N. (2002). The case for comprehensive sex education. *AIDS Patient Care & STDS*, *16*(7), 313-318. doi:10.1089/108729102320231144

Stein, M. D., Hanna, L., Natarajan, R., Clarke, J., Marisi, M., Sobota, M., Rich, J. (2000). Alcohol use patterns predict high-risk HIV behaviors among active injection drug users. *Journal of Substance Abuse Treatment 18*(4), 359 –363.

Straus, M. A. (1990b). Social stress and marital violence in a national sample of American families. In Straus, M. A., and Gelles, R. J. (eds.), *Physical Violence in American Families*, Transaction Publishers, New Brunswick, NJ.

Straus, M., Gelles, R., & Steinmetz, S. (2006). *Violence in the American family: Behind closed doors.* Transaction Publishers.

Straus. M. A., & Hamby, S. L. (1995). Measuring physical and psychological maltreatment of children with the Conflict Tactics Scales. University of New Hampshire. Durham, NH.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17,* 283– 316.

Snyder, M., Omoto, A. M., & Crain, A. L. (1999). Punished for their good deeds: The stigmatization of AIDS volunteers. *American Behavioral Scientist, 42*, 1175-1192.

Substance Abuse and Mental Health Services Administration (2003). *Co-Occurring Disorders: Integrated Dual Disorders Treatment: Implementation Resource Kit*. Rockville, Maryland: Center for Mental Health Services.

Testa, M., Livingston, J., & Leonard, K. (2003). Women's substance use and experiences of intimate partner violence: A longitudinal investigation among a community sample. *Addictive Behavior* 28(9), 1649-1664. doi:10.1016/j.addbeh.2003.08.040

Teitelman, A. M., Ratcliffe, S. J., Morales-Aleman, M. M., & Sullivan, C. M. (2008). Sexual relationship power, intimate partner violence, and condom use among minority urban girls. *Journal of Interpersonal Violence, 23*(12), 1694–712. doi: 10.1177/0886260508314331

Thompson, R. S., Bonomi, A. E., Anderson, M., Reid, R. J., Dimer, J. A., Carrell, D., & Rivara, F. P. (2006). Intimate partner violence: Prevalence, types, and chronicity in adult women. *American Journal of Preventive Medicine, 30*(6), 447–457. doi:10.1016/j.amepre.2006.01.016

Thoits, P. A. (1992). Identity structures and psychological well being: Gender and marital status comparisons. *Social Psychology Quarterly, 55*(3), 236-56.

Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups.* Wiley, New York.

Tjaden, P. G., & Thoennes, N. (1998). *Prevalence, incidence, and consequences of violence against women: Findings from the national violence against women survey. Research in brief* (NCJ 172837). Washington D. C, U.S.

Tjaden, P. & Thoennes, N. (2000). *Full report of the prevalence, incidence, and consequences of violence against women: finding from the national violence against women survey*. National Institute of Justice. Washington D. C. United States.

Tortu, S., McMahon, J. M., Hamid, R., & Neaigus, A. (2000). Drug-using women's sexual risk: An event analysis. *AIDS and Behavior, 4*(4), 329-340.

United Nations Population Fund. (2003). State of World Population 2003: Making one billion count: Investing in adolescents' health and rights.

United States Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey. (2006). *Intimate Partner Violence Face Sheet*. Retrieved on December 24th 2009 http://www.vahealth.org/Injury/projectradarva/documents/older/pdf/IPV_BRFSS.pdf

U.S. Department of Health and Human Services (2010). Healthy people 2020. National Health Promotion and Disease Prevention Objectives. Washington D.C. Retrieved on April 20th 2012 http://www.health.org/healthy people.

U.S. Department of Health and Human Services. (2000). Healthy People 2010. National Health Promotion and Disease Prevention Objectives. Washington D.C.

Virginia Sexual and Domestic Violence Action Alliance. (2009). *VA data Domestic Violence Services Report*.

Waite, L. & Gallagher, M. (2000). The case for marriage: *Why married people are happier, healthier and better off financially*. Doubleday, New York.

Walker, M. E., Wasserman, S., & Wellman, B., (1993). Statistical models for social support networks. *Sociological Methods and Research, 22*(1), 71-98. doi: 10.1177/0049124193022001004

Watt, H, M., Bobrow, A, E., Moracco, K. E (2008). Providing support to IPV victims in the emergency department: vignette-based interviews with IPV survivors and emergency department nurses. *Violence against women, 14*(6), 715-26. doi: 10.1177/1077801208317290

Watstein,S. B., & Chandler, K. (1998). *The AIDS Dictionary*. Facts on File, Inc, New York.

Wang, C., Morrel-Samuels, S., Hutchison, P., Bell, L., & Pestronk, P. (2004). Flint photo voice: community-building among youth, adults, and policy makers. *American Journal of Public Health, 94*(6), 911-913.

Wellman, B., & Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *American Journal of Sociology, 96*(3), 558–588. doi:10.1086/229572.

Weir, B.W., Bard, R. S., O'Brien, K., Casciato, C. J., Stark, & M. J. (2008). Violence against women with HIV risk and recent criminal justice system involvement: prevalence, correlates, and recommendations for intervention. *Violence against Women, 14*(8), 944-960. doi: 10.1177/1077801208320901

Weinbaum, Z., Stratton, T. L., Chavez, G., Motylewski-Link, C., Barrera, N., & Courtney, J. G. (2001). Female victims of intimate partner physical domestic violence (IPP-DV), California 1998. *American Journal of Preventive Medicine, 21*(4), 313-319. doi:10.1016/S0749-3797(01)00363-4

Wenzel, S. L., Bakhtiar, L., Caskey, N. H., Hardie, E., Redford, C., Sadler, N., & Gelberg, L. (1995). Homeless veterans' utilization of medical, psychiatric, and substance abuse services. *Medical Care, 33*, 1132–1144.

West, M. C. (1998). Lifting the 'political gag order': Breaking the silence around partner violence in ethnic minority families. *In Partner violence: A comprehensive review of 20 years of research*, Jasinski, L. J., & Williams, M, L. (eds.). 184-209. Sage, Thousand Oaks, CA.

Wilder, E., & Watt, T. (2002). Risky Parental Behavior and Adolescent Sexual Activity at First Coitus. *Milbank Quarterly, 80*(3), 481-524. doi:10.1111/1468-0009.00020

Williams, K. J., Wyatt, E. G., Myers, F. H., Green, K. N., & Warda, S. U. (2008). Patterns in relationship violence among African American women: future research and implications for intervention. *Journal of Aggression, Maltreatment and Trauma, 16*(3), 296-310.

Wight, R.G., Aneshensel, C. S., & LeBlanc, A. J. (2003). Stress buffering effects of family support in AIDS caregiving. *AIDS Care, 15*(5), 595-613. doi:10.1080/09540120310001595096

Windle, M. (1997). The trading of sex for money or drugs, sexually transmitted diseases (STDs), and HIV-related risk behaviors among multi-substance using alcoholic inpatients. *Drug and Alcohol Dependence 49*(1), 33-38. doi:10.1016/S0376-8716(97)00136-1

Wingood, G. M., DiClemente, R. J., & Raj, A. (2000). Adverse consequences of intimate partner abuse among women in non-urban domestic violence shelters. *American Journal of Preventative Medicine*, *19*(4), 270-275.

World Health Organization (2010). Violence against Women and HIV/AIDS, United States Department of Health and Human Service. Healthy People 2020. Retrived from http://healthypeople.gov/2020/TopicsObjectives2020/pdfs/HP2020_brochure.pdf

Wong,W., Lee, A., Tsang, K. K. (2004). Correlates of Sexual Behaviors with Health status and Health Perception in adolescents: A cross-sectional survey in schools. *AIDS Patients Care and STDS, 18,* 470-480.

Wu, E., El-Bassel, N., Witte, S.S., Gilbert, L., & Chang, M. (2003). Associations between intimate partner violence and HIV risk among urban, low-income, minority women. *AIDS and Behavior, 7*(3), 291-301. doi:10.1023/A:1025447820399

Yick, A. G. (2000). Predictors of physical spousal/intimate violence in Chinese American families. *Journal of Family Violence, 15*(2), 249-267. doi: 10.1023/A:1007501518668

Yick, A. G. (2001). Feminist theory and status inconsistency theory: Application to domestic violence in Chinese immigrant families. *Violence Against Women, 7*(5), 545-562. doi: 10.1177/10778010122182596

Yllo, K., & Strauss, M. A. (1981). Interpersonal violence among married and cohabiting couples. *Family Relations, 30*(3), 339-347.

Zierler, S., Cunningham, W., Andersen, R., Shapiro, M. F., Nakazono, T., et al., (2000). Violence victimization after HIV infection in a US probability sample of adult patients in primary care. *American Journal of Public Health, 90*(2), 208–15.

Zimet, G. D., Dahlem, N. W., Zimet, S. G., Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment,52*, 30–41.

Zimet, G. D., Powell, S. S., Farley, G. K., Werkman, S., Berkoff, K. A. (1990). Psychometric characteristics of the Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 55*, 610–617

Zinn, M. B. & Dill, B.T. (1996). Theorizing difference from multicultural feminism. *Feminist Studies, 22* (2), 321-33

## BIOGRAPHICAL INFORMATION

Yasoda Sharma is a social work Ph.D. graduating from The University of Texas at Arlington School of Social Work. She obtained a BSW from Christ College, Blangalore, India and an MSW from Banaras Hindu University, Varanasi, India.

After completing her masters, Yasoda worked in various national and international organization, her area of practice expertise is, Adult mental Health, Reproductive Health, Domestic Violence, HIV/AIDS, Intimate partner Violence and Dating Violence. She has always been very passionate about education and she loves to teach. Yasoda had published several articles in various journals and was a recipient of Who's Who among student in American University and Colleges in 2009. She has received several scholarship during the period of her doctoral education, she was a recipient of the Dean's Merit Doctoral Scholarship and Promising Ph.D. Student Scholarship.