

**THE INTIMATE PARTNER VIOLENCE AND HIV SYNDEMIC AMONG MSM:
GAINING A BETTER UNDERSTANDING OF DISEASE OVERLAP**

by

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∴ Social marginalization and homophobia often foster the production of syndemics and health disparities among MSM populations. Despite findings of the overlap between intimate partner violence (IPV) and HIV in various other populations, research among gay and bisexual men (GBM) and MSM continues to be limited. The small set of literature that does exist suggests excess burden of disease in MSM populations, thereby revealing the public health importance of this problem. A systematic literature review was conducted with the primary objectives of synthesizing relevant literature addressing the intersection of HIV and IPV among MSM, summarizing and critiquing this existing set of published literature, and discussing the implications for future research and practice.

Methods: A comprehensive literature search of HIV and IPV among MSM and/or GBM resulted in the synthesis of 19 studies in the U.S.. Articles were considered for full review if they met with previously established inclusion criteria. The final set of literature was analyzed for general content and for matters related to research design and methodology.

Results: Overall, rates of MSM-specific IPV ranged from 12% to 56%. Findings indicated that partner abuse is associated with risky sexual behavior, thereby placing MSM and GBM at greater risk for HIV. Also, prevalence of various forms of IPV among HIV positive persons was

revealed. Age, race, and childhood abuse were identified as correlates in the intersection of these two epidemics. In addition, several studies also noted the co-occurrence of substance abuse, partner violence, and HIV as a trend among MSM.

Conclusion: Several recommendations are made to strengthen the newly emerging arena of HIV and IPV syndemic research. Suggestions for policy and practice are also discussed in light of these dual epidemics found among MSM. Sound research design, measurement, and community-based participatory approaches are ultimately required for the development of MSM-specific interventions and prevention programs that tackle and stunt these mutually reinforcing epidemics.

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PREFACE

This thesis is dedicated to my beloved grandfather. Your unconditional love, killer sarcasm, and passion for all things are a constant and comforting memory to me. I feel your presence every single day and I hope I have made you as proud of me as I am of you.

And to my parents, my grandmother, Gautham, and Stacie, words are not sufficient to describe my gratefulness and gratitude of your undying affection and support. I am truly the luckiest girl.

And finally, to my dear committee, I would not have wanted to finish my graduate career without your presence by my side. Jessie, you are more than just a great mentor, you are a true friend. Thank you for all the opportunities you have given me over the years to grow as a student and as a researcher. I know that our relationship will only mature from here. Dr. Terry, thank you so much for your nurturance and guidance throughout the past three years. And Dr. Silvestre, thank you for being such an amazing role model; I will forever admire your grace and leadership.

1.0 INTRODUCTION

This paper highlights the empirical literature regarding the syndemic relationship between intimate partner violence (IPV) and Human Immunodeficiency Virus (HIV) among men who have sex with men (MSM) in the U.S.. Overall, the intersection of these two health problems has been understudied among MSM, but the small set of literature that does exist suggests excess burden of disease in MSM populations. These epidemics co-exist and are created and sustained by various economic, social, and political factors that are characteristic of a syndemic orientation (Milstein, 2002). The implications for the prevention and treatment of such a complex overlap in diseases are serious and must go beyond the current method of addressing each health problem individually (Milstein, 2002).

The field of medical anthropology has played an integral role in developing a biocultural approach to conceptualizing major health problems. This holistic approach to understanding and responding to the health of communities has recently resulted in the introduction of the term syndemic, which originated from the work of Merrill Singer and his examination of co-occurring and mutually reinforcing epidemics in poor urban communities (Milstein, 2002). A syndemic is defined as two or more afflictions, interacting synergistically, contributing to excess burden of disease in a population (Milstein, 2002). Syndemic productions have also been described as a clustering of health problems by person, place, or time that solicits solutions capable of

preventing and controlling each disease along with the underlying factors that connect such diseases (Milstein, 2002).

With the aid of several notable researchers, the Centers for Disease Control and Prevention (CDC) have developed a Syndemics Prevention Network that has thus far shaped and developed the key principles and definitions related to syndemic productions. Research in IPV on the other hand has been plagued with varying definitions and measures of partner abuse. An all-inclusive definition of intimate partner violence is required to capture the true scope and severity of this public health problem. Therefore, this paper will be guided by the following definition of intimate partner violence put forth by the CDC: “The term intimate partner violence describes physical, sexual, or psychological harm by a current or former partner or spouse” (CDC, 2007).

Partner violence can include such tactics as threatening to hit someone, calling them names, pushing, shoving, kicking or slapping a partner, and/or forcing unwanted sex. IPV has been found to have both short and long term health effects among abuse victims and include such issues as post traumatic stress, depression, physical injuries, frequent headaches, gastrointestinal problems, and STDs (Campbell, 2002 & Campbell et al., 2002). Such conditions lead to a poor quality of life and frequent utilization of health services (Tollestrup et al., 1999 & Wisner et al., 1999).

Since the advent of the HIV epidemic, the American MSM population has been disproportionately affected by this disease, with recent findings indicating that the incidence of HIV has in fact risen among this sexual minority population (CDC, 2007). Unlike the vast amount of attention and scholarship concerning the detrimental health effects that HIV has had on MSM, the recognition of IPV as a public health issue has only recently been noted by

scientists, with little attention to directed towards MSM partner abuse. Partner violence among homosexuals and bisexuals is a significant psychosocial problem that continues to be overshadowed by the abuse experiences of heterosexual women and couples due to societal homophobia and preconceived notions of gender roles. Recent literature finds IPV rates of 25% to 35% for same-gender partners (McClennen, 2005). The few studies that document same-sex partner abuse also find the prevalence and severity of abuse to be similar to that of heterosexual victims, indicating that IPV does not discriminate by gender or sexual orientation (McClennen, 2005). The small set of literature on the topic indicates that this male sexual minority group is vulnerable to the negative health outcomes of partner abuse.

The systematic literature review that follows uses a comprehensive approach to extrapolating and synthesizing relevant peer-reviewed articles regarding the nexus of MSM-specific partner violence and HIV in the United States. Ultimately, this review has been designed to: (1) Synthesize relevant literature addressing the intersection of HIV and IPV among MSM (2) Summarize and critique this existing set of published literature and (3) Discuss the implications for future research and practice.

2.0 BACKGROUND

This section begins with an overview of the underlying principles and implications of the newly emerging field of syndemics. An outline of syndemic productions among the MSM community, recently theorized by Stall and colleagues (2008), will also be addressed. In addition, a review of current HIV and IPV trends as they relate to MSM populations will be presented. And finally, the section concludes with a discussion of the specific pathways through which HIV and partner violence interact and contribute to excess burden of disease.

2.1 REVIEW OF SYNDEMIC PRODUCTON PRINCIPLES

Syndemic orientation represents “a way of thinking about public health work that focuses on connections among health-related problems, considers those connections when developing health policies, and aligns with other avenues of social change to assure the conditions in which all people can be healthy” (Milstein, 2002). Conceptualizing the health of communities by way of syndemic orientations represents a profound shift in public health thinking. The primary principle underlying a syndemic orientation is the notion that multiple health problems can intersect and have additive and harmful effects to the overall health and well being of a community. At the heart of this new approach lies what Singer and Clair (1996, 2003) find to be the two primary drivers of syndemic productions, poverty and cultural marginalization.

Therefore, syndemic orientation combines the tenets of epidemiology with the principles of social action (Milstein, 2002). Furthermore, this approach functions under the assumption that epidemics among different populations are not created or maintained in a random manner (Milstein, 2002). Rather, it is the disadvantaged and disenfranchised groups and communities that suffer the most. Overall, this new way of conceptualizing community health involves the identification of disparities and a push towards health equity.

As Milstein (2002) aptly explains, a practical application of syndemic orientation actually begins with an investigation of the community rather than the disease of interest. So the order of questioning and studying a syndemic first entails examining and identifying why a particular community has been plagued with various afflictions. The investigation then questions why that specific set of afflictions is falling upon the community of interest (Milstein, 2002). Then, an appraisal of the conditions that are required to combat the syndemic is required (Milstein, 2002). And finally, the last area of inquiry calls for a study of the particular circumstance under which interventions attain success in enhancing the health status and health equity of the target community (Milstein, 2002).

The benefits of conceptualizing community health by way of syndemic orientation are five-fold (Milstein, 2002):

- 1) Intervening on factors that drive the interplay among multiple health problems
- 2) Protecting the health of populations by rectifying the apparent fragmentation in infrastructure
- 3) Expanding research and action agendas by combining health with social justice
- 4) Developing and introducing new methods of analysis and synthesis
- 5) Establishing a science base for a “community health bill of rights”

2.2 MSM-CENTERED SYNDEMIC THEORY

In translating the aforementioned syndemic principles and line of questioning to the current study of co-occurring epidemics among MSM, an examination of why this community is particularly vulnerable to such a dangerous interplay of health problems must first occur. Stall and colleagues (2008) have recently developed a theory for syndemic production among urban gay men that serves as a framework for comprehending the various factors that help to create and sustain the multiple health problems afflicting MSM in the U.S.. This paper is guided by this innovative theoretical model, which operates on the following four assumptions (Stall et al., 2008): (1) The cluster of health problems among MSM and/or gay men is mainly socially produced. (2) Since this is a socially driven clustering, such conditions will change over time and over generations, therefore the theory applies primarily to middle-class gay men who came into adulthood in the tail-end of the 20th century. (3) This theory is also meant for urban gay men since a majority of the data reflecting health disparities among MSM and gay men were extrapolated from urban populations. (4) A particular fraction of men are homosexual in each generation, with some of these men exhibiting nonconformity to society's ideals of masculinity, from a very young age.

In their attempt to hypothesize why this population is particularly vulnerable, Stall et al. (2008) credit the overwhelming cultural marginalization experienced by the MSM community as the sole producer of MSM syndemic production. The authors expand this issue further by discussing two sub-factors that emerge during the early developmental stages of homosexual men. The first factor deals with the socially-powered damage or injury that gay men endure from their early adolescent stages of male socialization all the way through to their adoption of a homosexual identity in early adulthood. The second factor involves the minority stress that gay

men encounter when they move to large urban “gay ghettos”, which essentially refer to well defined neighborhoods hosting a large gay male population (Stall et al., 2008). Together, these two dynamic factors foster the development of disease clustering among American MSM.

Overall, this syndemic theory is developmental in nature and presents a timeline for various gay milestones and environmental modifiers that emerge and affect young gay men during every stage of growth. From the time that gay adolescents grow aware of their sexual preferences, their social development with respect to their physical appearance, behavioral mannerisms, and personal interests is noticeably different in comparison to their heterosexual counterparts (Stall et al., 2008). This alternative path to male socialization is generally not embraced by society and often times results in incidents of anti-gay violence and discrimination that occur during a very fragile and vulnerable time in a young gay boy’s life (Stall et al., 2008).

Full acceptance of their homosexuality has not yet been reached at this point, therefore, many gay boys feel “silenced” by their sexuality which can then present itself through “strong self-censorship, disassociation during sex play with other males, sexual shaming, and a strong devaluing of other boys who are understood to be gay” (Stall et al., 2008). These various behaviors are characteristic of internalized homophobia and can make gay youth more vulnerable to psychosocial health problems, such as substance abuse and depression (Stall et al., 2008).

When these youth reach late adolescence, they become more aware of gay culture, social networks, and gay social norms. The way in which young gay men make contact with gay culture is important and determines whether they will be able to develop strengths in overcoming the continuing societal adversity they will face throughout their lives (Stall et al., 2008). As mentioned previously, many gay men migrate to gay ghettos upon adulthood. And while some gay men are able to withstand and move forward from the negative experiences that occurred in

their youth, others are less resilient and fall prey to some of the negative social aspects of gay culture found in urban gay ghettos (Stall et al., 2008). Prior research also indicates that residents of these ghettos have significant health disparities in comparison to other male populations (Stall et al., 2008).

Ultimately, the subset of gay men unable to balance a healthy lifestyle in urban gay ghettos are afflicted by multiple psychosocial health issues such as violence, depression, and substance abuse (Stall et al., 2008). This is the point at which a syndemic production in the MSM community is apparent.

2.3 HIV AMONG MSM IN THE U.S.

From the advent of the deadly HIV outbreak, MSM have been more vulnerable to this viral infection and are therefore disproportionately affected by the disease. MSM represent 54% of all AIDS cases and 57% of all people who have died from AIDS, since the start of the epidemic (CDC, 2007). Their share of HIV prevalence among the male adult population represents 71% of all HIV infections as of 2005 (CDC, 2007). Among the various transmission categories for male adults and adolescents, male to male sexual contact was found to be the primary mode of transmission based on confidential name-based HIV reporting data gathered for the year 2005 (CDC, 2007). Injection drug use (18%) is the second largest category for transmission, with 27% of injection drug users also engaging in male to male sexual contact (CDC, 2007). Surveillance data also calculated and revealed an 11% increase in the number of HIV diagnoses among MSM from 2001 through 2005 (CDC, 2007).

Aside from this recent increase in incidence, a shift in disease burden has occurred whereby African American MSM now account for a greater proportion of the disease in comparison to other racial groups. Supporting this trend is a recent investigation of HIV prevalence among MSM conducted in five major American cities that revealed a 46% HIV prevalence rate among African American MSM (CDC, 2005). From 2001 to 2006, HIV/AIDS diagnoses increased by 12.4% among all black MSM; however, an increase of 93.1% was observed among black MSM aged 13--24 years (CDC, 2008). From 2001 to 2006, estimates revealed at least twice as many (7,658) HIV diagnoses occurred among African American MSM between the ages of 13 and 24 compared to White youth (3,221) of the same age (CDC, 2008).

Engaging in anal sex without the use of a condom has been noted to be the primary cause for the increase in HIV incidence rates among this sexual minority group (Mansergh et al., 2002). In examining the underlying factors that drive MSM to engage in risky sexual behavior, a primary aim of syndemic orientation would be to understand why this disease is occurring among this population. Thus far, researchers have identified several factors that influence risky sexual behavior (i.e., lack of condom use) among MSM that include but are not limited to: (1) serosorting (i.e. limiting sexual intercourse to intimate partners that have a known and similar HIV serostatus), (2) substance abuse, and (3) complacent attitudes about perceived risk and maintaining safe sexual practices (CDC, 2007). Though the identification of these factors has advanced HIV prevention, more investigations are necessary to fully comprehend and answer the question as to why this epidemic occurs among MSM.

2.4 INTIMATE PARTNER VIOLENCE AMONG MSM IN THE U.S.

While HIV infection is a biological condition threatening the lives of MSM, intimate partner violence is a psychosocial health problem. IPV has proved to be much harder to screen for, identify, and treat, and therefore receives far less attention among both homosexual and heterosexual populations than HIV and other public health problems. While few scholarly articles explore the abuse context among lesbians, an even less number of literature examines IPV among MSM and/or gay and bisexual men (GBM). This limited but significant body of literature regarding MSM partner abuse is examined in this section.

Before reviewing the prevalence and scope of this public health issue among MSM, it is important to highlight an important outcome of several studies comparing IPV between same-sex and different-sex individuals. A handful of studies reveals higher reporting of IPV among sexual minorities than among their heterosexual counterparts (Tjaden et al., 1999, Balsam et al., 2005, & Moracco et al., 2007). Also, specific types of partner abuse involving sexual coercion and rape, as well as all forms of child abuse were also more likely to be reported by LGB than by heterosexuals (Tjaden et al., 1999, Balsam et al., 2005, & Moracco et al., 2007). This information shows that same-sex IPV is a reality and just as prevalent.

The rates of male to male IPV range between 11% and 44% (Herek & Sims, 2008). This variability reflects different definitions of partner abuse across studies and such variance makes cross-study comparisons very difficult. Very few investigations have explored the correlates of abuse, and those that did found mixed outcomes. On the one hand, Greenwood et al. (2002) reported that race/ethnicity, income, and city of residence were not correlates of partner violence among gay and bisexual men. Meanwhile, Turell's (2000) examination of abuse correlates among an LGBT sample found significant ethnic differences for physical abuse and coercion and

that age and higher income were both risk factors for IPV. In addition, little is known about the potential abuse differences between gay and bisexual men. Only Balsam et al. (2005) examined group differences and found bisexual men more likely to report a history of non-intercourse sexual coercion and a history of rape than gay men, suggesting a possible disparity.

To date, the objective of partner violence research among MSM and/or GBM has been to measure the prevalence of this psychosocial health problem. The descriptive analysis provided by Cruz and Firestone (1998, 2003) steps away from this usual line of investigation and attempts to gain a deeper understanding of the abuse context among MSM and GBM regarding types of abuse, factors that led to partner abuse, and reasons for remaining with a violent partner.

This qualitative investigation by Cruz and Firestone (1998, 2003) involved in-depth interviews with a sample of twenty five GBM. Personal definitions of abuse from GBM respondents were used in order to gain a better understanding of what abuse meant for this sub-population. Most of the definitions used by respondents to describe IPV focused on power and control (Cruz & Firestone, 1998). The primary outcomes allude to similarities and differences between homosexual and heterosexual victims with regards to the types of abuse that are endured, reasons for the abuse, as well as the reasons respondents cited for remaining in a violent relationship (Cruz & Firestone, 1998, & Cruz, 2003). Respondents reported experiencing various forms of verbal, mental, physical, and sexual partner abuse (Cruz & Firestone, 1998). Aside from such factors as jealousy, financial strains, drugs or alcohol, and inter-generational transmission of violence, GBM also identified issues related to internalized homophobia as a causal factor for same-sex IPV (Cruz & Firestone, 1998). And finally, GBM from this study provided a variety of reasons for remaining in an abusive relationship that were grouped into the following 14 categories: financial, emotional, and physical dependence, love,

naivete/inexperience, feeling trapped, hope for change, loneliness, commitment, cycle of violence, fear, guilt, low self-esteem, and physical attraction (Cruz, 2003).

MSM and GBM partner violence research is still in its infancy and requires further examination. Until this occurs, it is difficult to address the underlying factors that produce this psychosocial issue in American MSM communities.

2.5 INTERSECTION OF HIV AND IPV

All syndemics have one or more pathways by which each health problem links to the other. Identifying and understanding these links or points of interaction allow researchers to develop interventions that will aid in combating these factors that lead to disease interaction. It is important to note that though links regarding the co-occurrence of IPV and HIV have primarily been investigated among urban heterosexual women, this paper postulates that these previously identified pathways of disease interaction could potentially be applicable to homosexual populations as well.

The following four points of interaction between violence and HIV among women were identified by Maman et al. (2000): (1) Violence increases the risk for HIV infection through forced/coercive sex, (2) Violence in the form of forced/coercive sex limits the victim's ability to negotiate condom use, (3) Violence in the form of physical and sexual abuse during childhood has been associated with high sexual risk-taking behaviors in adolescence and adulthood, and (4) Disclosure of HIV serostatus to partners may subsequently lead to partner violence. Though these mechanisms represent a good framework for conceptualizing the co-occurrence of these two epidemics, little is known about the pathways of disease interaction among MSM and/or

GBM populations. Therefore, this paper is an exploratory investigation of MSM-specific comorbidity.

The systematic review in the coming sections represents the first of its kind to synthesize existing literature regarding the syndemical relationship between HIV and IPV among MSM. Along with a discussion of the current trends among the two intersecting epidemics, a summary and critique of research methodology will also be presented. Ultimately, this paper aims to strengthen the understanding of the interplay between partner violence and HIV in MSM in the U.S.. The paper concludes with recommendations for both research and practice specific to this syndemic.

3.0 METHODS

3.1 COMPREHENSIVE SEARCH STRATEGY

A comprehensive search strategy was utilized to help gather an inclusive set of articles that explore and discuss the intersections of HIV and partner violence found in American MSM. The author utilized three online databases - PubMed, PsycINFO, and SocioFile, in order to identify scholarly articles in a variety of medical and social science disciplines. Various combinations of the following search terms were employed for the literature search: violence, domestic violence, partner violence, battering, battered, batter, abuse, partner abuse; Gay, Bisexual, homosexual, same sex; HIV, AIDS. The search of literature was not limited by the year of publication.

3.2 INCLUSION AND EXCLUSION CRITERIA

A set of inclusion and exclusion criteria was developed to allow for selection of articles that are relevant to the review. All articles found through the comprehensive literature search were either selected or excluded by employing the following criteria:

- 1) Only include articles from peer-reviewed journals; Exclude chapters from books, magazine articles, newspaper articles, and other non-peer reviewed sources.

- 2) Include articles of studies using original data; Exclude articles that are review or opinion pieces.
- 3) Include only articles of studies conducted in the United States.
- 4) Include articles of studies with an all-MSM or LGB sample or a sub-sample of MSMs.
- 5) Include only articles that consist of adult/18 years or older samples.
- 6) Include articles that primarily focus on partner violence and exclude those that look at multiple forms of violence (e.g. child abuse, anti-gay violence) such that the results for partner violence are hard to determine.
- 7) Include articles that study lifetime abuse or the progression/association of child abuse to adult partner abuse; Exclude articles focused only on child abuse.
- 8) Exclude articles that discuss only issues, risks, and other factors pertaining to batterers and perpetrators of partner violence.

3.3 SELECTION OF LITERATURE

The comprehensive search strategy involved three stages of review that included a title search, an abstract search, and a full article assessment. Beginning with the title search, the author read the results of each literature search (N=2,681) and selected or excluded those titles that met the inclusion and exclusion criteria, and excluded titles that were duplications. A total of 290 titles retained from the initial title search were then scanned for relevancy by reading each of the abstracts and determining inclusion with the help of the criteria. The final stage of article selection was conducted during a review of the full length articles that were retained from the abstract search.

The author also reviewed citations found in the articles gathered from the third and final stage and added important new references to the final group of literature. A set of 19 peer-reviewed articles was assembled for the final literature review, exploring the intersection of MSM-specific intimate partner violence and HIV.

3.4 ANALYSIS OF LITERATURE

A literature table (See Appendix) was constructed to summarize each article selected for the final review of published literature. The table provides an overview of the study aims, sample population(s), study methods, and significant findings from each investigation. The table is further divided into sub-tables that characterize the four overarching and emerging themes from this particular syndemic literature. The results section contains a synthesis of this small set of literature and is organized by the general outline of the literature table. The general outline and manner in which the final set of literature are reviewed and presented in the next section follows and builds upon Gielen et al.'s (2007) exploration of the same disease interaction among heterosexual women.

4.0 RESULTS

This section (1) synthesizes relevant literature addressing the intersection of HIV and IPV among MSM and (2) summarizes and critiques this existing set of published literature (i.e., discuss various aspects of research design and methodology utilized by the studies).

The studies found in Table 1 (Appendix A) relate to the intersection of HIV and IPV among MSM/GBM. This set of literature is organized in the following manner: Four studies regarding HIV as a risk factor of IPV (Table 1A), Five studies of IPV among HIV positives (Table 1B), Six studies of substance use, IPV, and HIV (Table 1C), and Four studies comparing IPV and HIV among Heterosexuals versus MSM/GBM (Table 1D).

4.1 HIV RISK AMONG MSM/GBM VICTIMS OF IPV

The four studies found in Table 1A are similar in their undertaking of assessing and exploring the experiences, patterns, and severity of IPV among same-sex and bisexual individuals, along with the examination of unsafe sex practices and risk for HIV/AIDS. All studies in this sub-table used a cross-sectional approach and obtained data through surveys and questionnaires. All studies were composed of ethnically diverse samples of sexual minorities, with two out of the four boasting fairly large sample sizes (n=273 and n=817).

Verbal and psychological abuse were the most commonly cited types of IPV (Merrill & Wolfe, 2000, Heintz & Melendez, 2006, & Houston & McKirnan, 2007). The rates of abuse reported by Heintz and Melendez (2006) and Merrill and Wolfe (2000) were significantly higher (98% verbal abuse, 71-87% physical abuse, and 45-73% sexual abuse) than Houston and McKirnan's (2007) and Nieves-Rosa et al.'s (2000) findings (20.6-33% verbal abuse, 19.2-35% physical abuse, and 12-17.6% sexual abuse) due to the purposive sampling methods employing respondents who were current or previous victims of abuse.

Shifting to the secondary aim of these studies, HIV risk among victims of violence was measured by engagement in unprotected sexual intercourse. This risky sexual behavior was found to be more common among abused MSM versus non-abused MSM (Nieves-Rosa et al., 2000, Houston & McKirnan, 2007). Furthermore, the link between condom negotiation and partner abuse was explored by Heintz and Melendez (2006), who found significant rates for all types of abuse among MSM (33% verbal, 21% physical, 21% sexual) who had attempted to negotiate safer sex with their partner. The authors also revealed that those forced to have sex by their partner were more likely to report not using any protection because they feared their partner's response (26%) to this request and wanted to avoid (36%) such problems (Heintz & Melendez, 2006).

In addition, Merrill and Wolfe (2000) revealed that 13% of this sample reported that their partner sometimes or frequently “tried to infect or infected” them with HIV and nearly half reported seroconverting (i.e. becoming HIV positive) as a result (Merrill & Wolfe, 2000). The authors also attempted to explain the effect that HIV status had on the maintenance of an abusive relationship, citing that a proportion of their HIV positive sub-sample remained in such relationships due to their fear of becoming sick and dying, not wanting to abandon their HIV positive partner, and because they feared dating in the context of the HIV epidemic (Merrill & Wolfe, 2000).

Though all four studies consisted of racially diverse samples, Houston and McKirnan (2007) was the only study to analyze between-group differences revealing IPV did not vary by race. Such factors as age and HIV serostatus were also unrelated to partner abuse (Houston & McKirnan, 2007). Apart from HIV risk, a significant number of negative health outcomes and psychosocial factors associated with IPV were found among abused MSM. Health problems such as hypertension, heart disease, obesity, depression, smoking-related illness (Houston & McKirnan, 2007) substance use, and childhood sexual abuse to an extent (Nieves-Rosa et al., 2000), were all revealed to be associated with domestic violence.

4.2 IPV AMONG HIV POSITIVE MSM/GBM

The group of studies found in Table 1b reviewed risk and prevalence of IPV among HIV positive MSM. The study aims ranged from examining IPV prevalence, to analyzing the impact of gay-related development (GRD) on IPV and poor health outcomes, to studying the possible onset of IPV upon an HIV positive diagnosis. Each of these cross sectional studies conducted phone or

computer assisted interviews, with one study conducting secondary data analysis from previously administered interviews that contained retrospective and cross-sectional information. A majority of the literature included study samples of more than 1,000 respondents. A few of the studies utilized and examined the dataset from the Urban Men's Health Study (UMHS), thereby limiting the generalizability of the results (Greenwood et al., 2002 & Friedman et al., 2007).

Partner violence was measured across various time frames (i.e. current and past) among this subset of studies, and varied from violence in the past twelve months, to the past five years, to lifetime incidents of IPV. Aside from such differences in temporal measurement, rates of partner violence were somewhat consistent and ranged from 39% to 46.2% (Greenwood et al., 2002, Craft and Serovich, 2005, Shelton et al, 2005, & Friedman et al., 2007). Age was found to be the strongest correlate of any and multiple types of IPV (Greenwood et al., 2002), with MSM younger than 40 years of age at a higher risk of victimization (Greenwood et al., 2002 and Zierler et al., 2000). Some studies revealed that racial minorities were at higher risk for victimization, with Hispanic GBMs being at most risk for all types of partner abuse, especially sexual abuse (Zierler et al., 2000 & Shelton et al., 2005). Interestingly, these outcomes contradict findings related to risk factors such as race and age discussed in the previous section.

Aside from IPV prevalence and reporting, Zierler et al. (2000) also attempted to explore the incidence of partner violence proceeding the diagnosis and disclosure of one's HIV positive status. Results indicated that approximately 11.5% MSM reported physical abuse since disclosing their HIV status to an intimate partner and 4.5% identified their HIV status as a cause of the abuse (Zierler et al., 2000). Finding out serostatus, irrespective of whether one was positive or negative, placed a higher likelihood of partner abuse among MSM (Greenwood et al., 2002 and Friedman et al, 2007) compared to MSM who had never been tested for HIV (Greenwood et al., 2002).

Several of the studies examined other possible correlates of IPV and HIV among homosexuals that extended beyond factors such as age and race. For instance, Friedman et al. (2007) found the timing of gay developmental milestones as a risk factor, with gay-related development (GRD) that occurred earlier in life being associated with greater partner abuse compared to men experiencing GRD at middle and later stages in life. Childhood abuse was also found to place GBM at greater risk for IPV (Craft and Serovich, 2005, Friedman et al., 2007), especially among respondents who were physically abused by their parents during the early stages of their lives (Friedman et al., 2007). In addition, Craft and Serovich (2005) differentiated between witnessing parent-to-parent violence and being a receiver of parental abuse and found both to be correlated with perpetrating and being a victim of sexual coercion. And finally, substance abuse among HIV positive MSM was also found to increase the risk of partner victimization (Zierler et al., 2000).

4.3 SUBSTANCE USE, IPV, AND HIV AMONG MSM/GBM

Similar to the SAVA (Substance abuse, Violence, and AIDS) syndemic, previously studied among heterosexual women, the articles outlined in Table 1C argue that the co-occurrence of these three health problems are equally prevalent among MSM and/or GBM in the U.S.. This subset of cross sectional studies both interviewed and/or surveyed MSM and GBM regarding a range of psychosocial health problems that included but were not exclusive to HIV risk, sexual risk behaviors, and domestic violence.

As in previous sections, several of the studies conducted secondary data analysis of information collected from the Urban Men's Health Study (UMHS). In terms of sample size, most studies had large samples of 300 or more participants, while only one recruited a fairly small sample of 117 MSM who were also serodiscordant couples. And with regards to HIV status, only two studies involved HIV positive MSM and GBM while the rest examined risky sexual behavior and HIV risk among the general MSM and GBM populations.

Fairly consistent with the rates of partner violence among HIV positive MSM/GBM found in Table 1B, prevalence of IPV ranged from 34% to 45% in the current set of literature measuring domestic violence and other negative health outcomes associated with substance use among male same-sex samples (Klitzman et al, 2002, Koblin et al, 2006, & Mustanski et al, 2007). Younger age was found to be a risk factor for substance abuse and IPV (Klitzman et al, 2002, Koblin et al, 2006 & Relf et al, 2004). In addition, childhood abuse, whether it was threats of violence or actual physical and sexual abuse, was found to be associated with drug use and IPV (Stall et al, 2003, Koblin et al., 2006, & Relf et al., 2004).

In addition, factors such as gay identity and degree of "outness" were also found to be associated with partner violence, substance abuse, and high risk/unprotected sex (Klitzman et al.,

2002 & Relf et al., 2004). Klitzman et al. (2002) revealed that MDMA (ecstasy) users in their sample of MSM were more likely than non-MDMA users to be more “out” among friends and family and to have been victims of partner violence. And Relf et al.’s (2004) study of gay identity revealed that affiliation and participation in the gay community, gay self-identification, and being “out” had a direct relationship with HIV risk behaviors. These factors of gay identity also had an indirect relationship with HIV risk behaviors via the final fitted structural model that resulted from structural equation modeling (SEM) analyses: Substance Abuse and HIV Alienation → Aversive Emotions → Battering → HIV Risk Behaviors (Relf et al., 2004).

The additive effects of behavioral and psychosocial problems leading to a syndemic and the subsequent increase in risk of HIV transmission among MSM/GBM were perhaps the most significant outcomes addressed by the literature in Table 1C. Psychosocial health problems such as drug use, IPV, and high risk sex among MSM/GBM were all associated with being HIV positive (Mustanski et al, 2007 & Stall et al, 2003). Findings also affirmed that a greater number of health problems (IPV, childhood abuse, substance abuse, depression) would increase the odds of risky sexual behavior and HIV infection (Mustanski et al, 2007 and Stall et al, 2003), thereby confirming that this disease interplay would magnify vulnerability to infection among this sexual minority group.

4.4 IPV AND HIV AMONG HETEROSEXUALS VS. MSM/GBM

Concluding the discussion concerning the overlap of partner violence and HIV among same-sex individuals, Table 1D provides both a combined and comparative discussion of violence and risky sex among HIV positive heterosexuals and MSM/GBM. The primary aim of the four studies found in this last sub-table was to examine the associations between IPV and unprotected sex among HIV positives. One particular investigation also attempted to determine the association of partner violence with health service utilization among HIV positive individuals (Eisenman et al., 2003).

It is important to note that almost all studies in this subset utilized data from the nationally representative HIV Cost and Services Utilization Study (HCSUS), therefore considerably limiting the scope and applicability of the findings to other MSM/GBM populations. Meanwhile, the study conducted by Chuang et al (2006) used baseline data from the HIV-Alcohol Longitudinal Cohort Study (HIV-ALC). All four cross-sectional studies collected data from surveys and interviews, with two studies measuring both perpetration and victimization. Also, all four studies consisted of large samples ranging from 300 to almost 2,500 participants.

Overall findings reflected differences regarding prevalence of IPV between MSM and their heterosexual counterparts, with Chuang et al (2006) finding equal rates of lifetime violence reported by MSM and heterosexual men, while Galvan et al (2004) reported that heterosexual males and females have higher rates of victimization compared to MSM. Specific to sexual violence, study outcomes indicated that MSM were more likely to report such experiences compared to heterosexual men (57% vs. 24%) and also more likely to experience childhood sexual violence than heterosexual men (34% vs. 18%) (Chuang et al, 2006). Chuang and

colleagues (2006) more importantly revealed an association between lifetime sexual violence and inconsistent condom use after controlling for covariates (i.e age, sex, race, education, alcohol/drug use in past 30 days, CES-D score). This same relationship between sexual IPV and unprotected intercourse was also supported by the work of Bogart et al (2005).

Only one investigation in this subset, conducted by Galvan et al (2004), sought to explore the correlates of IPV and risky sexual behavior. The authors revealed that younger age was correlated with both perpetration of violence and victimization and African American heterosexuals and homosexuals had a higher likelihood of being either a perpetrator or victim of IPV after controlling for other factors (Galvan et al, 2004). HIV disease progression was measured by calculating CD4 counts and analyzed as a possible risk factor for partner abuse. It was revealed that GBM and heterosexual men and women from HCSUS with higher CD4 counts were more likely to report being victims of partner abuse than those with low CD4 counts (Galvan et al, 2004).

Though the primary focus of this literature review has been among MSM victims of abuse, there are a few noteworthy results from this subset of literature, utilizing data from HCSUS, which discuss sexual risk taking among perpetrators of violence. Overall, results from the mixed sample of heterosexuals and GBM of this nationally representative study indicated GBM perpetrators of IPV compared to non-perpetrators were more likely to engage in unprotected sex (Bogart et al, 2005). Findings also revealed that perpetrators (homosexual and heterosexual) reporting substance use with sex were almost twice as likely as non-perpetrating substance users to engage in unprotected sex (Bogart et al, 2005). And in terms of a possible link between HIV serostatus and IPV, respondents were more likely to be perpetrators of violence if they had a partner who was HIV positive versus a partner whose HIV status was unknown (Galvan et al, 2004).

And finally, results related to health service utilization among HIV positive persons should be addressed for the wider implications these outcomes hold for practice. The GBM in this study were all HIV positive and had increased odds of going to the emergency department without hospitalization, forgoing necessary medical care due to the expense, and were generally unable to access medical specialists if they experienced violence victimization (Eisenman et al, 2003). Along with inadequate access to medical care, HIV positive GBM compared to positive heterosexuals had less odds of utilizing mental health services (Eisenman et al, 2003).

5.0 DISCUSSION

Before addressing the third and final objective of this thesis, proper acknowledgement must be paid to the significant number of investigations reviewed in this paper that have paved the way in studying the disease overlap of HIV/AIDS and partner violence affecting American MSM. The recognition and exploration of these intertwining epidemics by this small group of researchers has brought the field of syndemic orientation to a new level of understanding with regards to the poor health profiles found within MSM populations. It is through such pioneering work that these scientists are able to provide a platform for awareness of the apparent inequities affecting the health and social well-being of gay men in this country. Future research and funding mechanisms must continue to support these endeavors since syndemic research is still a developing field that requires rigorous examination due to the unique and holistic approach that it employs towards community health.

With that said, the remainder of this section presents recommendations for research, policy, and practice as they relate to the nexus of HIV and IPV among MSM. Four areas of recommendation have been developed to expand, enhance, and respond to the syndemic of interest.

5.1 BRIDGING THE GAPS IN SYNDOMIC RESEARCH

From the critique of literature, there are several notable gaps in research design and methodology that should be addressed by future syndemic research. For instance, study design has primarily consisted of cross-sectional examinations of IPV and the interplay between violence and the HIV epidemic. But in the advent of syndemic production, it is necessary that causal relationships be assessed by carrying out longitudinal and prospective research regarding such issues as the onset of IPV following diagnosis and partner notification of HIV serostatus as well as unsafe sexual practices and other modifying factors that increase the risk of HIV transmission among victims of IPV.

The syndemic orientation is concerned only with the health and well being of communities, but researchers in this specific area of disease overlap have yet to collaborate with and involve the members of these communities in syndemic investigation. Researchers must recognize the importance of enlisting community based participatory approaches to the examination of MSM health, especially when it concerns such sensitive and stigma-riddled topics as HIV and partner abuse. Partnering and collaborating with community agencies and other venues catering to the gay community would make gaining entrée easier with this sexual minority group. And since syndemic productions are said to gradually occur and develop over a lengthy time span for MSM and gay men (Stall et al, 2008), it would be beneficial for researchers and the MSM/GBM community alike to build and maintain a long term relationship based on mutual learning. This community-based approach would then allow researchers to gain a deeper understanding of MSM-specific syndemic productions while at the same time raising awareness among the MSM community of the multiple health dangers that they are at risk for, and possibly enlisting the help of the community to develop sound interventions.

Also, qualitative data, whether collected through focus groups or in-depth interviews, are required to fully grasp the scope and context within which MSM communities are suffering from the dual effects of partner abuse and HIV/AIDS. Ultimately, proactive participation of the MSM community in this facet of research will provide this minority group a platform for voicing their needs and will also give them a sense of ownership of public health issues afflicting their community.

One area of study that is missing from existing literature is the examination of partner violence incidents following disclosure of HIV status to intimate same-sex partners. Though evidence from this set of literature suggests that HIV positive and negative MSM/GBM are more likely to report abuse than those never tested for the epidemic, none of the studies directly inquire nor aim to explore the link between IPV and HIV disclosure. Therefore, this particular point of disease interaction identified by Maman et al (2000) should be examined in the future. Secondly, several studies indicated a significant prevalence of childhood abuse as well as its association with negative health outcomes in adulthood for MSM/GBM, but none has examined the linkage between this form of abuse and engaging in risky sex in later stages of life. This is yet another mechanism conceptualized by Maman et al (2000) that requires further investigation.

5.2 STRENGTHENING IPV RESEARCH AND POLICY

The current review reveals that research on partner violence continues to be plagued by a variety of descriptions and measures for what constitutes abuse. This methodological problem has resulted in the broad range of prevalence rates (12% to 56%) found across the studies examined in this paper and thereby proving cross-study comparisons of IPV prevalence to be impossible.

As a result, the true prevalence rate of partner violence among MSM continues to be unknown and is a hindrance to the understanding and advancement of syndemic research in this particular area. Therefore, a primary recommendation, echoed by researchers in the field of IPV (Maman et al, 2000, Gielen et al, 2007, & Burke and Follingstad, 1999) is the need to adopt a standardized definition of intimate partner violence, mirroring the suggested classifications put forth by the CDC.

Along with this standard definition, researchers must also agree to measure partner violence using a standard time frame. The temporal assessment of partner violence differed considerably among this set of HIV and IPV literature. Also, in measuring the occurrence of partner violence with a current and/or ex-partner, researchers should collect information regarding both lifetime and current partner abuse. But while some studies solicited reports of both current and past IPV, numerous others examined only one and not the other or defined previous IPV to be the prior year or in the past five years. Therefore, comparative analysis of MSM partner violence literature is again deemed a difficult feat.

While standardizing the definition of IPV has been recommended over and over by researchers and the CDC alike, perhaps the research community is unaware of possible barriers that contribute to the clear hesitation to unify research in IPV. For all this variance in methodology and measurement in the field of IPV, it might prove helpful to conduct an examination among IPV researchers regarding their perspectives of a standard IPV definition, their reasons for employing such varying measures of violence, and possible solutions to unify and make IPV research more efficient and effective in uncovering true prevalence and severity. This first-hand insight from investigators in the field of partner violence could prove helpful in

understanding and developing alternative and appropriate approaches to measuring IPV in both homosexual and heterosexual populations.

Aside from these necessary changes in the field of research, policy makers should also consider developing and improving new and existing domestic violence policies that hereby enforce a standard and all-inclusive definition of IPV. This policy should apply to domestic violence agencies and other public, private, and community-based institutions that treat victims of violence, whether they are MSM/GBM groups, the larger LGBT community, or heterosexuals. This practice oriented policy might in turn have spillover effects in the research front with the potential to influence investigators to adopt the definition in their work since it is employed in practice.

5.3 IMPROVING ACCESS TO CARE FOR MSM/GBM

Without the adoption of the aforementioned recommendations for research, the full scope of this syndemic will not be realized and will therefore have little to no impact on practice. But, there are still pathways through which the current systems of care and service delivery can enhance response to HIV positive MSM/GBM victims of violence and abused gay men at risk for HIV. The first primary area of concern with regards to access to care would be the total absence of shelters for men experiencing partner victimization. Gay men experiencing IPV are equally in need of a safe haven as female victims of partner abuse. The need for this area of care should be addressed through policy so as to foster the development of men's shelters offering protection from abusive male and/or female partners.

Care should also be taken to address the co-occurrence of this psychosocial health problem during HIV counseling and testing, at HIV medical clinics, and during alcohol and drug rehabilitation. These venues are far more accessible and utilized by MSM/GBM and should work in tandem to screen and treat partner violence among these patients. Such venues should also carry resources and referrals for protection from and prevention of IPV. In short, the intersection of such epidemics solicit interventions that are more integrated and holistic in nature, and also call for various systems to interact and collaborate, thereby addressing the overall health and well being of the community rather than focusing on one problem or disease at a time.

5.4 ENHANCING PREVENTION EFFORTS FOR MSM/GBM

From the synthesis of literature discussed in the previous section, high-risk sexual intercourse, the use and abuse of drugs and alcohol, and fear of partner violence as it relates to condom use negotiation and possibly HIV status, have all emerged as drivers of this MSM-specific syndemic. It can be said that the current methods of prevention for both IPV and HIV have been unsuccessful in reaching the MSM/GBM population in an effective and comprehensive manner. As noted by recent research (CDC, 2007), there is cause to believe that the MSM community has been unsuccessful in maintaining safe sexual practices due to “prevention burnout.” In light of these findings and the complexities of this disease overlap, once again a participatory approach entailing partnerships with the MSM community is warranted in order to develop tailored and holistic approaches that tackle the range of factors maintaining the dual epidemics. Understanding the needs of the community of interest is the most appropriate and cost-effective manner in which to respond and lessen the burden of the HIV and violence syndemic.

The literature review also began to reveal racial disparities among the MSM/GBM population with regards to this specific disease overlap. Further attention must be paid to developing outreach and prevention programs that target men who carry the double and/or triple stigma related to being a racial and sexual minority living with HIV/AIDS. More research is also required to fully uncover the factors behind this racial disparity among male sexual minorities.

Another area of consideration is the development of primary prevention strategies for the various psychosocial health problems and HIV risks that have been known to affect MSM/GBM from a very young age. Existing literature concerning the interplay of HIV and IPV suggests that younger age is a risk factor for this syndemic. This supports the syndemic theory developed by Stall and colleagues (2008) that acknowledges the early onset of socially produced health and environmental problems affecting American MSM. Perhaps one way in which the future of MSM syndemic related prevention programs could benefit is by building upon the work of Friedman et al (2007), whereby a primary prevention strategy targets young gay males at various stages of development. This approach can potentially aim to inhibit the poor health outcomes that occur later in their adult lives as a result of gay related developmental factors and societal homophobia. Such prevention programs can be developed and implemented via healthy social venues that many young gay youth attend when they become more accepting of their homosexual identity and initiate active participation in gay culture.

6.0 STRENGTHS AND LIMITATIONS

While the search and review of considerable literature was conducted in a systematic manner, the articles synthesized in this paper are relevant but may not represent an all-inclusive set. The investigations described in this paper are also limited to the IPV and HIV context in the U.S. and therefore cannot be applied to syndemic orientations among other cultures and regions. Aside from these limitations, a noteworthy strength of this research paper is the employment of three widely utilized and recognized databases, each a repository of work from three different scientific disciplines – medicine, psychology, and sociology. The selected articles were also limited to adult populations thereby providing an easier approach to comparative analysis but limiting the extent to which the full scope of these intertwining epidemics are examined.

Unlike previous systematic reviews (Burke & Follingstad, 1999), where studies of batterers/perpetrators were included, the current review mainly sought to describe the abuse experiences and HIV related issues afflicting victims of violence. Though the examination of perpetrator-specific matters are imperative to comprehending the entire scope of IPV, a separate review and analysis of literature is required to accurately assess this facet of partner violence. And finally, the author's use of inclusion and exclusion criteria narrowed the range in literature gathered for this assessment but ultimately resulted in a collection of studies that are imperative to addressing the overall goal and objectives of this paper.

7.0 CONCLUSION

Syndemics have been found to exist among several minority and disadvantaged populations in the U.S. over the recent decades. The intertwining and mutually reinforcing violence and HIV/AIDS epidemics pose very serious consequences for the overall health status of American MSM. Though there is a growing set of literature attempting to examine the various pathways and correlates of these co-occurring health problems, there are significant gaps in research that must be attended to if the primary goal is to reduce and prevent the prevalence of such dangerous overlaps.

The development of interventions that simultaneously tackle the intersecting relationship between violence and HIV must do so in a culturally appropriate and sensitive manner, taking into consideration the specific needs of MSM individuals. In short, the often heterosexist perspective held among society has led to discrimination and various forms of violence directed towards the MSM community. To this end, the psychosocial stress placed upon this population has manifested itself in the form of public health problems addressed thus far in this paper. By utilizing research as a sounding board for raising awareness and importance to MSM health matters, accountability lies primarily among scientific investigators to provide a strong voice for sexual minorities who are often silenced and suffer unjustly. The MSM community is also accountable for the future of their health and well being and should be integrated into and involved more in syndemic research.

APPENDIX

LITERATURE TABLES

Table 1 Literature Table: Intersection of HIV and IPV among MSM

Table 1A: HIV Risk among MSM/GBM victims of IPV					
Author	Aim	Study Sample	Methods	Results	
1	Heintz AJ & Melendez RM, 2006	To examine the effects of IPV on HIV risk among LGBT currently in abusive relationship or recently been in one.	58 LGBT domestic violence clients: 42 MSM, 11 Lesbians, 4 transgender women, 1 transgender man; Recruited from the New York City Gay and Lesbian Anti-Violence Project.	Cross sectional design; Surveys; IPV current or in past year, – extent of abuse and injuries; Asked 2 questions for sexual violence: (1) Ever been forced to have anal/vaginal sex w/ abusive partner and if partner used condom, (2) Asked if partner forced them to have anal/vaginal sex w/ others, and if condoms were used at that time.	Verbal abuse 98%, Physical violence 71%, and Partner assault w/ weapon 26%. Sexual violence - 45% and unprotected sexual violence -53% in MSM. 19% MSM never engaged in safer sex, 67% MSM felt safer sex decreased in relationship over time. Reasons for decrease in condom use: MSM’s partners refused to continue practicing safer sex (32%), became violent w/ regard to safer sex (18%), and frightened to bring it up w/ partner (14%). Safer sex negotiation: 36% MSM not using condoms to avoid problems and 26% feared partner’s response. Safer sex and abuse and MSM: verbal-33%, sexual-21% , and physical-21%; 24% reported partner told them they used protection when they did not. Those forced to have sex more likely to report not using protection b/c they feared partner’s response.
2	Houston E and McKirnan DJ, 2007	To describe patterns of IPV among MSM and the psychosocial factors associated with this abuse.	817 ethnically diverse MSM recruited from venues in Chicago; Subjects approached by outreach workers at Gay Pride events, Latino clubs, and local street fair.	Cross sectional design; Surveys; Sexual abuse: feeling forced to have unwanted sexual contact; Physical abuse: unwanted physical harm (hit, slapped, kicked, shoved, burned, cut, etc); Verbal abuse: unwanted physical and sexual threats, physical humiliation, or control in relationship. IPV in current or past;	Current and past abuse: 32.4%; Any time abuse: 20.6% Verbal, 19.2% Physical, and 18.5% Sexual; 17.6% experienced more than one form of abuse, 10% two forms, and 7.6% all three forms. Abused MSM more likely to report unprotected sex in past 6 mo. and more likely to seek treatment at gay/bi health centers. Ethnic group, age, and HIV sero-status not related to abuse. Depression and substance abuse strongly correlated to IPV. Abused men more likely to report health problems i.e. hypertension, obesity, smoking related illness, and STIs to an extent.

Table 1A Continued

3	Merrill GS and Wolfe VA, 2000	To explore experiences of battered gay and bisexual men.	52 GBM and recruited through gay domestic violence programs in San Francisco, Boston, Dallas, L.A., and NY and through HIV agencies in San Francisco. Self-identified as gay/bi and had to be DV victim.	Cross sectional design; Surveys; Assess physical abuse, emotional, sexual and financial abuse, but do not specify a definition of IPV.	IPV: 87% recurrent physical, 90% financial, and 73% sexual abuse. 62% reported more than 5 physical abuse incidents w/ 37% reporting 11-100 incidents. Emotional abuse most common and reported by entire sample. HIV and IPV: 13% reported partner sometimes/frequently "tried to infect or infected" them w/ HIV and nearly half reported seroconverting as a result. 60% of the 20 HIV+ GBM stayed in relationship due to fear of becoming sick and dying, 50% of the 14 HIV + GBM partners stayed b/c they did not want to abandon them, and 30% of HIV + GBM stayed b/c fear of dating in context of HIV epidemic. Help seeking: sought help of friends, counselors, and gay men's DV programs and found HIV agencies, other social service agencies, and gay men's domestic violence program as most helpful.
4	Nieves-Rosa LE, Carballo-Diequez A, and Dolezal C, 2000	To examine severity of DV in Latin American MSM and its implications for HIV risk behavior.	273 Latin American MSM in NYC who have been in committed relationship at least once in their lives; Recruited through flyers and condoms wrapped in promotional material. Ruled out those who had occasional homosexual contact and sampled those who were sexually active MSM.	Cross sectional design; 2 Questionnaires, administered by interviewer and self-administered; Sexual Practices Assessment Schedule; Domestic violence defined as any psychological – ever intimidated or humiliated by any partners, physical-ever harmed by physical aggression inflicted by partners, or sexual abuse-been forced by partner to have receptive anal sex w/out condoms after 1981. Assessed perpetration, childhood sexual abuse, and substance use.	IPV: 33% verbal/psychological, 35% physical, 12% sexual abuse of which 20% forced to have receptive anal sex w/out condoms in current relationship and remaining 80% experienced in previous relationship. 51% experienced some form of abuse, 26% considered themselves victims. 93% had been tested for HIV and 33% of them were positive. Significant relationship b/w abuse and engaging in unprotected receptive/insertive anal sex. Strong association b/w use of marijuana, crack/cocaine, ever using heroin, downers, uppers, or poppers and being a victim. MSM engaged in unprotected receptive anal sex w/ lover more likely to have reported physical and sexual abuse. Childhood sexual abuse only marginally associated w/ domestic violence.

Table 1B: IPV among HIV (+) MSM/GBM

5	Craft SM and Serovich JM, 2005	To examine prevalence and types of IPV present among HIV + gay men and violence experienced in families of origin.	51 HIV+ gay men currently or in a relationship in the past year ; Convenience sample recruited from visits to a longitudinal study during an HIV educational forum, and a regional HIV conference.	Cross sectional design; Interviews. Current (last 12 months) IPV prevalence and chronicity; Conflict Tactics Scale 2 (CTS2): psychological, physical, and sexual abuse. Family of Origin Violence Scale: father-mother, mother-father, and parent-child violence.	IPV: Psychological - 78.4% perpetrated and 72.5% victims, Physical - 39.2% perpetrated and 45.1% victims, Sexual - 27.5% perpetrated and 33.3% victims, Physical Injury - 23.5% perpetrated and 25.5% victims. 45% violence in past year. Mother and father violence witnessed by 49%. Witnessing mother-father violence correlated w/ perpetrating/victim of sexual coercion, and being victim of physical injury. Receiving parental abuse correlated w/ perpetrating/victim of sexual coercion and perpetrating physical assault.
6	Friedman MS, et al, 2007	To examine relationships b/w gay-related developmental (GRD) milestones, experiences of abuse and emergence of poor health outcomes in adulthood.	1,383 of 2,881 GBM recruited from random-digit dialing as part of 4 urban-city study - Urban Men's Health Study (UMHS)	Cross sectional design; Secondary data-analysis using retrospective and cross-sectional data from interviews. Abuse in past 5 yrs; Physical: hit w/ fist or open hand, hit w/ object, thrown something, pushed, shoved, or kicked. Psychological: verbal threats, verbally demeaning in front of strangers, forced to get high/drunken, damaged/destroyed property, stalked. Sexual: forced sex.	IPV (prior 5 years): Total of 46.2%, Early GRD 49.9%, Middle GRD 42.7%, and Late GRD 45.4%. Partner abuse greater for early GRD group than middle GRD group. Greater odds of partner abuse for those reporting parental physical abuse. Greater odds of partner abuse, gay-related victimization, depression, being HIV +, and attempting suicide as an adult for early GRD group than middle and late GRD groups. Forced sex and child abuse also increased odds of negative health outcomes during adulthood.

Table 1B Continued

7	Greenwood GL, et al, 2002	To examine prevalence of IPV in probability-based sample of MSM.	2881 MSM; recruited from random digit dialing as part of the UMHS; 4 urban cities: L.A., San Francisco, NY, and Chicago;	Cross sectional design; Phone interviews; CTS; Battering in past 5 years; Physical: hit w/ fists, open hand, w/ object, pushed, shoved, kicked, or having something thrown at you. Sexual: forced to have sex. Psychological/symbolic: verbal threat, demeaned in front of others, ridiculed for appearance, forced to get high/drunk, stalked, having property destroyed/damaged. Global measure: any battering and multiple battering.	IPV: 34% psychological/symbolic, 22% physical, and 5.1% sexual; HIV+ more likely to be victims than MSM not yet tested for HIV and MSM not yet tested less likely than HIV – to experience multiple types or any battering. Age, HIV serostatus, and education independently assoc. w/ IPV. HIV serostatus associated w/ all types of battering except sexual violence. Age strongest demographic correlate of IPV – any or multiple types; MSM younger than 40 were 6x likely and MSM b/w 40-50 4x likely to report multiple types vs. MSM 60 and older. HIV+ and – MSM 1.5x likely to experience multiple types of abuse.
8	Shelton AJ, et al, 2005	To examine the prevalence of self-reported partner violence among ethnically and sexually diverse self-identified HIV positive men.	54 HIV+ (self-report) hetero and gay and GBM; Recruited from HIV+ support groups and referrals from recruited subjects; Needs assessment for high risk populations for the Community Planning Group and the Houston DHHS. 80% GBM.	Cross-sectional design; Computer assisted personal interviews; IPV or physical violence defined as ever been hit by an intimate partner, both primary and casual; Lifetime forced sex by primary and casual sexual partner.	IPV: 39% physical violence by primary partner and 17% by casual; Lifetime forced sex: 32% w/ primary and 15% w/ casual; Ethnicity significant factor for forced sex by primary partner, w/ non-whites (AA 32%, Hispanic 67%) reporting higher than whites (8%). Significance w/ number of primary partners and forced sex, w/ mean number of primary partners in 12-mo. period higher among those ever forced to have sex compared to those who were not.
9	Zierler S, et al, 2000	To estimate the proportion of HIV+ adults that have been abused since HIV diagnosis and extent to which they cite status as cause of IPV.	2,864 HIV+ adults who made at least 1 health service visit; HCSUS - nationally representative probability sample.	Cross sectional design, computer assisted interview. Abuse assessed by 2 questions: (1) "Since your HIV dx, have you ever been physically hurt by your partner or someone important to you? And (2) "Do you think it was related to or b/c of your HIV infection?"	IPV and HIV: 11.5% men who reported sex w/ men as mode of HIV transmission reported physical abuse since HIV diagnosis. 4.5% of MSM linked HIV status as cause of abuse. Victimization risk higher among MSM younger than 40, those who were Hispanic, self-identified as gay/bisexual, no financial assets, had female partner, were homeless, or reported history of drug dependence.

Table 1C: Substance Use, IPV, and HIV among MSM/GBM

10	Dolezal C, et al, 2005	To examine the association b/w substance use and several indicators of relationship quality among HIV serodiscordant male couples.	117 HIV Serodiscordant Male Couples recruited through flyers, ads, referrals, word of mouth throughout New York City; emotionally involved in mutually committed relationship for at least 4 months, w/ one partner testing HIV + and the other testing HIV - ;	Cross sectional design; Both members of couple interviewed separately; Used 4 scales: 1) Dyadic Adjustment Scale, 2) 3 questions from Reynolds Brief Sexual Functioning Scale, 3) 2 subscales from Triangular Love Scale, and 4) Modified Interpersonal Relationship Scale. IPV: whether they or partner engaged in violent behavior in the past 2 months (threatening, hitting, pushing, throwing things, using a weapon, and forced sex).	Substance use in past 2 months: 79% Alcohol, 25% Marijuana, 15% Cocaine. Substance use by both members of couple: 68% Alcohol, 25% Marijuana, 8% Cocaine. Rates of use similar for HIV + and – participants. No substance use variable associated with domestic violence, but other relationship quality variables were significantly associated w/ at least one substance use variable. No evidence that substance use affects one aspect of relationship quality more than another. Cocaine associated w/ more negative relationship scores than alcohol and marijuana. Higher alcohol use correlated w/ lower sexual satisfaction and lower equality in relationship.
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Table 1C Continued

1	Klitzman RL, et al, 2002	To explore how common MDMA use is in a gay men, characteristics of MDMA users in terms of demographics, high risk sex behaviors, psychosocial problems, DV, disclosure of sexual orientation and degree of involvement in the gay community.	733 MSM from Urban Men's Health Study (UMHS) who answered MDMA usage question; National probability sample, recruited from random-digit dialing as part of 4 urban-city study;	Cross sectional design, using computer-assisted telephone interviewing technology; Interviews in English and Spanish. Measured IPV by asking whether a partner or boyfriend hit the subject w/ a fist or open hand, pushed or shoved, kicked or hit with an object. Also used CES-D to assess depressive symptomatology. Self-reported HIV status and unprotected receptive/insertive anal sex in past year.	IPV: 45% of MDMA users and 19.2% among non-MDMA users. MDMA Use: 13.7% of MSM in New York City w/ mean use of 6.24 times in past 6 months. Compared to non-MDMA users, users were younger, more likely to engage in high risk sexual behaviors, and report domestic violence, and to have disclosed their sexual orientation to family, friends, and co-workers. Also more out and participate more in the gay community.
12	Koblin BA, et al, 2006	To determine the proportion of young MSM who have experienced threats or violence by family or partners, to identify socio-demographic correlates of threats or violence by partners, and to examine whether two outcomes measures of HIV-risk, high risk sexual behavior, and substance use are associated with a history of threats or violence by family or partners.	539 young MSM, 15-22 years old, recruited through public venues in 7 cities; additional questions on threats of violence by family or partners were asked of subjects in New York City. 38% were 15-18, 63% gay and 29% bisexual	Cross sectional design using surveys; Socio-demographics, lifetime and recent (past 6 months) sexual behavior, lifetime and recent drug and alcohol use, history of STDs, HIV, antibody test results, and HIV testing history and psychosocial factors related to risk. Threats: Have you ever been threatened or intimidated by a parent, guardian, or family member/lover or partner? Is it happening now? Violence: Have you ever been hit, kicked, punched or otherwise physically hurt by parent, guardian, family member, or partner, non-steady partner, or steady partner? Is it happening now? Assessed forced sexual contact in lifetime. Club Drug use; Anal sex w/out condom in the past six months;	30% reported ever having been forced to have sex, 43% reported unprotected anal sex in past 6 months, and 34% reported using club drugs. Prevalence of threats: 56% threats or violence by family and 75% of this sub-sample exp. physical violence; 37% reported ever experiencing partner threats or violence, and of those who reported partner threats, 58% also experienced physical violence by partner; 25% reported threats or violence by both family and partner. Ongoing threats or violence: 6% family and 4% partner. Correlates of threats or violence: Those reporting ever experiencing threats or violence by partners were also likely to report a history of threats or violence by family. Those reporting threats or violence by partners were more likely to be older, be living with a partner, homeless, or living in a shelter or group home, to have previously had an HIV antibody test, and to have a history of forced sex or running away from home. Variables associated w/ threats or violence in multivariate analysis were older age (19-22), history of forced sex, and history of running away from home. Recent unprotected anal sex associated w/ history of threats or violence by family only and history of threats or violence by both family and partner. Club drug use had odds ratios of borderline significance for history of threats or violence by partners only and history of threats or violence by both family and partner.
13	Mustanski et al, 2007	To assess whether psychosocial health problems had an additive effect on increased HIV risk among YMSM.	310 ethnically diverse YMSM from Chicago, 16 to 24 years old; recruited from flyers, emails, college listserves, palm cards, and snowball sampling;	Cross-sectional design; CASI; AIDS Risk Behavior Assessment – binge drinking and street drugs, and sexual risk taking; Global Severity Index; IPV measured by 3 items: threatened, physically hurt, or bullied by a same-sex romantic partner. Sexual assault: 1) ever forced to have receptive anal sex, 2) sexually attacked b/c of sexual orientation, 3) sexually assaulted or forced to have sex by partner.	Rates of Psychosocial Health Problems: 34% reported IPV, 24% used street drugs, 51% reported marijuana use in past year. Regular marijuana use, sexual assault, and partner violence significantly related to HIV serostatus. Syndemic variable: 25% scored zero, 27% scored 1, 20% scored 2, 13% scored 3, 12% scored 4, 2% scored 5, and 1% scored 6. Syndemic variable associated w/ all 3 psychosocial health problems, increasing the odds of multiple anal sex partners by 24%, unprotected anal sex by 42%, and an HIV positive status by 42%. YMSM w/ 4 or more psychosocial problems had 3x prevalence of HIV relative to those w/ fewer problems. Violence increased the odds of having an HIV serostatus and was a trend for substance abuse.

Table 1C Continued

14	Relf MV, Huang B, Campbell J, and Catania J, 2004	To examine psychosocial and behavioral variables that influence HIV risk behaviors in MSM in context of gay identity development and violence (childhood sexual abuse and adult battering).	1,062 GBM, ages 18 to 86, recruited from random-digit dialing as part of the UMHS study; 84% Gay, 9% Bisexual, and 3% hetero and reported having sex w/ other men, and 4% “did not like labels” for sexual identity.	Cross-sectional predictive correlational design; structural equation modeling (SEM) used to test proposed theoretical model; Secondary data-analysis of phone interviews; IPV defined as physical and sexual battering by boyfriend or male intimate partner	Battering victimization influenced high risk sexual behaviors . Gay identity related to HIV risk behaviors both directly and indirectly through substance use, battering, aversive emotions, and HIV alienation. Younger MSM engaged in unprotected anal sex at higher rates than older MSM. Increasing age among MSM older than 30 had protective effect on reducing substance use, battering victimization, and aversive emotions. Based on SEM, substance use led to battering victimization, which was then linked to engaging in HIV risk behaviors. Overall, experience of aversive emotions due to childhood sexual abuse and HIV alienation led to increased risk for battering and victimization and engaging in HIV risk behaviors. Final fitted structural model did not explain a large amount of variance for HIV risk behaviors in the two random samples.
15	Stall R, et al, 2003	To analyze a large-scale household-based sample of urban MSM to test whether an additive interplay among a set of psychosocial health conditions is driving the HIV epidemic among gay men.	2881 MSM in LA, San Francisco, Chicago, NY; Recruited through random-digit dialing methods to sample households in each city; 18 or older who had sex w/ man since age 14 or self-identified as gay or bisexual.	Cross-sectional design; Interviews; CES-D; Unprotected anal intercourse w/ partner of known discordant or unknown status. Polydrug use of 3 or more drugs in 6mo. IPV defined as symbolic, physical, or sexual abuse in past 5yr w/ primary partner. Childhood sexual abuse at 16yrs or younger.	Polydrug use and IPV associated with being HIV positive and high-risk sex. Childhood sexual abuse independently associated w/ polydrug use and IPV. IPV independently associated w/ depression, childhood sex abuse, and polydrug use. Greater numbers of health problems significantly and positively associated w/ HIV infection and current high risk sexual practices, after controlling for demographics.

Table 1D: IPV and HIV among Heterosexuals versus MSM/GBM

16	Bogart LM, et al., 2005	To examine links b/w violence and unprotected sex in HIV + women, heterosexual men, and gay/bisexual men.	726 HIV + from 2 nd follow-up survey from HCSUS, national probability sampling to select sample of adults w/ known HIV status who had at least 1 health care visit at a facility. 286 women, 148 hetero men, 292 GBM;	Cross sectional design; Survey; Verbal, physical, and sexual abuse: threatened to hit or throw something, push, grab, or shove, kick, bite, or hit with fist, force to have vaginal or anal sex, Perpetration and victimization in last 6 months. Condom use in past 6 mo.	Abused more likely to engage in unprotected sex than non-abused. Victimization and unprotected sex significant after adjusting for socio-demographics and HIV disease progression. Perpetrators more likely to report engaging in unprotected sex in past 6 mo. than non-perpetrators. Unprotected sex more common among GBM perpetrators vs. GBM non perpetrators (54% vs. 33%). Perpetrators reporting substance use with sex almost 2x likely as non-perpetrating substance users to have unprotected intercourse (57% vs. 33%).
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Table 1D Continued

17	Chuang CH, et al, 2006	To examine whether inconsistent condom use is associated w/ a history of physical or sexual violence among HIV + individuals.	349 HIV+ adults w/ history of alcohol problems from HIV-Alcohol Longitudinal Cohort (HIV-ALC) study; Recruited from Boston Medical Center HIV Diagnostic Evaluation Unit, Beth Israel Deaconess Medical Center, a respite facility, methadone clinic, primary care practices, and through flyers at homeless shelters and HIV/AIDS agencies.	Cross sectional analysis using baseline data from HIV-ALC study; In-person interviews; Addiction Severity Index, CES-D, and Risk Assessment Battery; Physical violence defined as ever being physically assaulted that included being kicked, hit choked, shot, stabbed, burned, or held at gunpoint. Sexual violence defined as ever being sexually assaulted that included unwanted sexual touching anywhere on the body, touching of genitals and/or breasts, or made to have oral sex, vaginal/anal intercourse against will, by force or threat of force. Assessed lifetime violence and childhood sexual violence.	MSM and HM equally likely to report lifetime violence (82% and 77%) MSM more likely to experience sexual violence than HM (57% vs. 24%) MSM more likely to experience childhood sexual violence than HM (34% vs. 18%). Lifetime violence model revealed significant associations of sexual violence and childhood sexual violence w/ inconsistent condom use after controlling for covariates.
18	Eisenman DP, et al, 2003	To determine association of violence with health service utilization and self-reported access to health care among heterosexuals and GBM.	2,466 HIV + subjects from first follow-up interview of the HIV Cost and Services Utilization study (HCSUS).	Cross sectional design; Violence at baseline with utilization and access to health care at follow-up; 2,864 interviews at baseline and 2,466 follow-up interviews; Victimization: "Since your HIV diagnosis, have you ever been physically hurt by your partner or someone important to you?"	Violence victimization increased GBM's odds of emergency department visit w/out hospitalization, going w/out needed medical care b/c of expense, and poor ability to access medical specialists. Male and female hetero victims had greater odds of using mental health services.
19	Galvan FH, et al, 2004	Proportion of HIV+ adults that are victims or perpetrators or both; Difference by ethnicity, gender, and sexual orientation; Characteristics associated w/ abuse that account for variation by ethnicity, gender, sexual orientation.	1,421 nationally representative sample of HIV + persons in care. Sample taken from larger sample of subjects from the HIV Cost and Services Utilization Study (HCSUS). (See Bogart et al for recruitment details). 55.8% were MSM.	Primary and secondary data-analysis using retrospective and cross sectional data; Computer assisted surveys; Defined abuse to include perpetration and victimization. Abuse items on survey modeled after CTS b/ not treated as a scale. 5 items about abuse: 1) threatened to hit or throw something at person, 2) kicked, bit, or hit with a fist, 3) pushed, grabbed, or shoved, 4) forced to have vaginal or anal sex, and 5) forced to have vaginal or anal sex w/out a condom.	IPV: 26.8% reported abuse, 48% was mutual; perpetration and victimization occurred equally often (20% and 19.7%). Heterosexual males and females reported higher rates of victimization compared to MSM. No difference in prevalence of abuse by gender/sexual orientation groups. African Americans had higher likelihood of being perpetrator and victim after controlling for other variables, but Latino no longer significant. Younger age associated with perpetration and victimization. Those with a higher CD4 count more likely to report being victims vs. low CD4 count. People w/ HIV+ partners more likely to be perpetrators vs. unknown partner status. People w/ HIV+ partners more likely to be victims.

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