

# TRAUMA & HIV/AIDS

## A SUMMARY OF RESEARCH RESULTS



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# INTRODUCTION

**Merry Bullock, Director, Office of International Affairs  
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In 2006 the American Psychological Association began a series of Research Briefs brochures to provide short overviews of psychological research on topics relevant to the United Nations mission, priorities and agenda. This brochure is part of that series. It is a reprint of materials developed to complement a workshop on Violence against Women and Girls in the Era of HIV and AIDS, given at meetings in conjunction with the United Nations Commission on the Status of Women in February, 2007. The workshop was sponsored by a range of organizations working at the UN.

For further information on HIV/AIDS programs at the American Psychological Association, please contact the APA Office on HIV/AIDS on the web at <http://www.apa.org/pi/aids> or contact Director John Anderson at: [janderson@apa.org](mailto:janderson@apa.org) or Tel: +1-202-336-6051.



# BRIEF SUMMARY OF BEHAVIORAL AND SOCIAL SCIENCE RESEARCH RELATED TO WOMEN, VIOLENCE, TRAUMA AND HIV/AIDS

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## Introduction

Violence perpetrated against women is linked to risks for sexually transmitted infections, including HIV infection. Studies conducted in the US show that women in violent and abusive relationships are less likely to use condoms, more likely to incur abuse as a result of requesting condoms and more likely to contract sexually transmitted infections (STIs) than women who have not been in violent relationships (Kalichman et al., 1998; Wingood & DiClemente, 1997). Similar associations between violence, particularly sexual assault, and risks for STIs have been observed in Southern Africa (Garcia-Moreno & Watts, 2000).

Culturally sanctioned gender roles foster power imbalances that facilitate women's risks for sexual assault and STIs (Farmer et al., 1996; Jewkes et al., 2001; Pitcher & Bowley, 2002). Women who are addicted to drugs, abuse alcohol and are involved in sex trade, or survival sex, are among women with the least relationship power and are at the highest risk for both sexual assault and STIs (Ajuwon et al., 2001; Jewkes & Abrahams, 2002; Wojcicki & Malala, 2001).

## Interpersonal Violence

In comparison to the general population, people living with HIV tend to report experiencing more traumatic life events, particularly those that are violent and abusive (Gore-Felton & DiMarco, in press).

Kalichman and Simbayi (2004) conducted an anonymous street survey of 272 women living in an African township in the Western Cape, South Africa assessed demographic characteristics, history of sexual assault, HIV risk behaviors, substance use and nonsexual relationship abuse. Forty-four per cent of the women reported a history of sexual assault. Statistical techniques that controlled for participant age, education, marital status and survey location, showed that women who had been sexually assaulted were significantly more likely to have shared injection drug equipment, exchanged sex to meet survival needs, and used alcohol compared to women who had not been sexually assaulted. Women with a history of sexual assault were also significantly more likely to have multiple male sex partners, greater rates of unprotected vaginal intercourse, lower rates of condom protected anal intercourse, more sexual contacts involving blood, more STIs and genital ulcers. Finally, women who had

been sexually assaulted were more likely to have been non-sexually abused by relationship partners and were more likely to fear asking partners to use condoms. Many researchers now assert that violence assessment, particularly domestic violence, is an important adjunct for effective HIV prevention (Klein & Birkhead, 2000).

### **Violence Against Women and Disclosure of HIV Status**

(Excerpted with permission from the *Herald Port Elizabeth*, South Africa: April 25, 2006)

Women who disclosed their HIV status to their partners were not more likely to be beaten, according to research presented at the Microbicides 2006 Conference in Cape Town. "Actual rates of violence when women disclose are relatively rare," said Lori Heise of the US-based Global Campaign for Microbicides. "Women beaten upon disclosure are most likely to be in an existing violent relationship," said Heise, who headed the study for the World Health Organization.

Yet the perception that disclosure yields violence persists: Only 52 percent of women in developing countries will tell their partner if they are HIV-positive, compared to 71 percent in industrialized nations.

The research involved more than 24,000 women in 11 nations: Namibia, Peru, Ethiopia, Thailand, Brazil, Tanzania, Serbia, Samoa, New Zealand, Bangladesh, and Japan.

The lowest rate of domestic violence, 13 percent, was found in Japan. The highest rates were found in Peru (61 percent) and Ethiopia (49 percent). Rape was reported by only 4 percent of women in Serbia and Japan, but by 59 percent of women in Ethiopia and 31 percent in Tanzania. Except in Samoa, where stranger rape was more prevalent, the women were "more likely to be beaten or raped by their partners or husband than anyone else," Heise said.

Because WHO's research found that "men who are violent are also more likely to have outside partners," women in violent relationships are at a high risk of contracting HIV. Research has found that South African women with violent partners have a 50 percent greater risk of becoming infected with HIV, while in Tanzania, women who report violence are 10 times more likely to be HIV-positive.

Attitudes supporting this behavior are pervasive. When asked whether it was acceptable for women to be beaten for disobeying their husband, 78 percent of women in Ethiopia and 50 percent in Tanzania said yes; in Brazil, however, only 1 percent of women said yes. "In South Africa, many nurses think sexual infidelity can justify a beating, especially male nurses," said Heise, adding that awareness of gender and violence must be incorporated into voluntary HIV testing and counseling.

### **Childhood Sexual Abuse and HIV/AIDS**

There is a growing body of evidence that adults and adolescents who were sexually abused as children are more likely to engage in high risk activities that could increase their risk of exposure to HIV (Allers & Benjack, 1991; Bartholow

et al., 1994; Carballo-Diequez & Dolezal, 1995; Lemp et al., 1994; Zierler et al., 1991).

The sequelae of childhood sexual abuse (CSA) can have long-lasting deleterious effects on an individual's psychological, physical, and social functioning. For instance, sexual compulsivity has been linked to a history of abuse (Allers, Benjack, White, & Rousey, 1993; Carmen and Rieker, 1989) and is associated with behaviors that confer high risk for HIV transmission such as having multiple partners, or engaging in impulsive, unprotected sexual intercourse. Moreover, mood disorders that result from abuse such as chronic depression and behaviors that include self-destructive tendencies, revictimization, and drug/alcohol abuse can increase one's vulnerability to HIV infection (Allers et al., 1993).

### **Trauma-related Stress Symptoms and HIV/AIDS**

In addition to the traumatic experiences of interpersonal violence and abuse, being diagnosed with a chronic, life threatening illness has been categorized as a traumatic stressor in the Diagnostic Statistical Manual, 4th Edition (APA, 1994). Moreover, a growing body of research suggests that traumatic stress responses, and even full-blown PTSD syndromes, can ensue from the traumatic experience of being diagnosed with a life threatening illness. For instance, a number of studies have documented clinically significant cancer-related posttraumatic stress symptoms (i.e., intrusion, avoidance, & anxiety) (Alter et al., 1996; Butler, Koopman, Classen, & Spiegel, 1999; Cella, Mahon, Donovan, 1990; Cordova & Andrykowski, 2003; Koopman, et al., 2002). Very little empirical research has been conducted among HIV-positive persons examining this phenomenon. However, among the few studies that have examined trauma symptoms among HIV-positive adults, the results have been consistent with the cancer studies.

### **Mechanisms Linking Traumatic Stress to HIV Risk Behavior**

An important question to ask is, "Why does trauma lead to risk behavior?" While no studies have definitively established the mechanisms that link trauma with HIV risk behaviors, several models have been proposed. One hypothesis is that the psychological symptoms (e.g., intrusion, hyperarousal, and avoidance) associated with a traumatic experience may interfere with the individual's ability to integrate safer patterns of interpersonal and personal functioning. Clinical observation along with empirical research indicates that trauma symptoms are often accompanied by psychological distress such as frustration and anger.

Previous cross-sectional studies have shown that sexual abuse is the event that most often leads to PTSD among women (Breslau et al., 1991; Resnick et al., 1993). This coupled with evidence that there is a risk of increased drug disorders that is associated with an increased risk for HIV among individuals with PTSD has led some researchers to hypothesize that PTSD psychopathology may mediate the relationship between abuse and sexual risk behavior (Miller, 1999). A study among gay and bisexual men examined this assertion and found preliminary support that psychopathology does mediate the relationship between CSA and sexual risk behavior (Gore-Felton, 2006). Specifically, borderline functioning, dissociative symptoms, and intrusive trauma symptoms mediated the relationship between CSA and adult sexual risk behavior (Gore-Felton, 2006).

## **The Effect of Trauma on the Physiology of People with HIV/AIDS**

Through allostasis, the autonomic nervous system, the hypothalamic-pituitary-adrenal (HPA) axis, as well as the cardiovascular, metabolic, and immune systems protect the body by responding to internal and external stress. However, cumulative stress can disrupt this complex interactive system. HIV-positive individuals often have HPA axis dysregularities (Biglino et al., 1995), which may contribute to disease progression. Indeed, excessive activation of the HPA axis can influence immunologic processes that are related to HIV pathogenesis and disease resistance (Cole & Kemeny, 1997). Moreover, HIV-positive patients are more likely to have hypercortisolemia (i.e., chronic elevation of cortisol) (Swanson, Zeller, & Spear, 1998). This is also thought to be problematic because evidence suggests that chronic elevation of cortisol may increase HIV viral replication (Corley, 1995; Swanson et al., 1998). Recent research further indicates an association between depressive symptoms, cortisol, and disease progression among HIV-positive men (Leserman et al., 2000).

Clinical evidence suggests that stressful life events predict more rapid HIV disease progression. Indeed, research has found that for every severely stressful life event per six-month interval, the risk of early HIV disease progression doubled (Evans et al., 1997). In research on persons recently notified of HIV-positive serostatus, posttraumatic stress disorder (PTSD) symptoms of avoidance and intrusion was associated with greater distress, and avoidance was predictive of lower CD4+ percentages (Lutgendorf, et al., 1997).

### **Implications for Disease Management and Clinical Practice**

In addition to reducing risk behavior, cognitive-behavioral group interventions have been successful at reducing stress symptoms. Indeed, cognitive restructuring and coping skills have produced marked improvement in "reexperiencing" and "avoidance" symptoms. This is an extremely important clinical finding in light of the fact that the most frequently experienced symptoms in PTSD are reexperiencing and autonomic arousal symptoms (Resnick et al., 1993; Rothbaum et al., 1992). A body of evidence over the past decade indicates that when different treatment modalities are compared, cognitive-behavioral interventions are the most effective in alleviating trauma symptoms (Gore-Felton, 2000; Gore-Felton, Gill, Koopman, & Spiegel, 1999).

Incorporating psychosocial approaches to the standard treatment and care of HIV/AIDS patients may promote better health outcomes by reducing morbidity and mortality. Transforming how medicine views psychosocial factors within the context of chronic illness undoubtedly means treating HIV from an interdisciplinary approach, which focuses appropriate attention on the psychosocial influences that affect disease course.

### **Social Support**

There is substantial need for social support in the face of life-threatening illness. Under normal circumstances, social support helps individuals mobilize their psychological resources and master their emotional burdens as well as providing money, materials, skills and cognitive guidance to handle situations optimally. Studies have shown that the mere perception that adequate support is available can serve to buffer situational stress as much as is provided by the actual level of social support.

Social support may be an important factor in attenuating the stress experienced by HIV-positive individuals. An explanation as to how this may occur can be found within the theoretical framework of the stress-buffering hypothesis of social support. The stress-buffering hypothesis of social support (Cohen & Wills, 1985) refers to protection that social support provides against the effects of stressful events and situations. This protective effect of social support is thought to operate both by contributing to the resources available to individuals to cope with the stressor as well as by reducing the stress response to the stressor (Cohen & Wills, 1985).

## **Early Education and Prevention**

Most of the HIV that is transmitted worldwide occurs within the context of an intimate relationship, usually a sexual relationship. Policies that encourage dissemination of best prevention practices to youth before they become sexually active are necessary to build "sexual esteem." With "sexual esteem" girls will not feel the need to have sex before they are ready or because they fear losing the affection of someone they care about. Similarly, boys will not feel pressured to prove their worthiness through sexual conquests or their manhood by becoming a teen father or feeling pressured to engage in sex before they are emotionally ready. It is true that part of sexual education is learning how to use a condom correctly, however, when HIV prevention curriculums are carefully scrutinized it is evident that much more is being taught which includes self-efficacy, assertive communication, social support, self-esteem, self-worth, and for those who have experienced sexual trauma it is about reclaiming one's sexuality, learning to be sensual without sex, and restructuring the meaning of what a sexual being is.

Abstinence based programs appear to work for best early adolescents who have not yet become sexually active (Jemmott, Jemmott, & Fong, 1998). However, for adolescent who are already sexually active, education and prevention programs are necessary to decrease risk behavior and in some cases adolescents return to abstinence (Jemmott, Jemmott, Jemmott, & Fong, 1998).

Incorporating abstinence-only programs into education and prevention seems like the best approach to providing our youth with information that will delay sexual activity and keep those who are sexually active safe from unwanted pregnancies, STIs, and HIV infection. The cost savings to society and public health with such an approach would be substantial.

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