

# Impact of childhood sexual abuse on antiretroviral medication adherence, sexual risk behaviours and overall health among men who have sex with men

## ? Questions

- What are the effects of childhood sexual abuse on antiretroviral medication adherence, sexual risk behaviours and overall health among men who have sex with men?
- What effective interventions exist to address childhood sexual abuse-related issues among men who have sex with men?

## 🔑 Key Take-Home Messages

- Men who have sex with men are two to four times more likely than men in the general population to have experienced childhood sexual abuse (1).
- Men who have sex with men who have a history of childhood sexual abuse are more likely to be HIV-positive and more likely to engage in unprotected anal intercourse (2;3).
- Men who have sex with men who have a history of childhood sexual abuse experience high rates of adult sexual abuse and other forms of intimate partner violence (4-6). They also experience high rates of depression, anxiety, mood or mental disorders, eating disorders, suicidality, and drug and alcohol use (2;7-9).
- A history of childhood sexual abuse may affect antiretroviral adherence in men who have sex with men (1).
- Very few interventions have been developed to address the traumatic stress of childhood sexual abuse on HIV transmission risk. Of those, a stress-focused intervention and a cognitive behaviour health intervention seemed to be

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effective in reducing sexual risk behaviours among HIV-positive Latino and African-American men who have sex with men (10;11).

- Being sensitive to childhood sexual abuse histories among sexual minority populations is important when establishing interventions for reducing sexual risk behaviours (10-12).

## The Issue and Why It's Important

Men who have sex with men account for over half of all new HIV infections in Ontario (13). Men who have sex with men are often at risk of HIV infection due to unprotected receptive anal intercourse with HIV-positive partners or partners of unknown HIV status (14). Men who have sex with men who have a history of childhood sexual abuse are more likely to engage in risky sexual behaviours in adulthood (15).

Although the exact prevalence of childhood sexual abuse among men who have sex with men varies from study to study, a 2013 systematic review by Schafer et al. found the prevalence to be two to four times higher among men who have sex with men than men in the general population (1). Another systematic review published in 2011 found that prevalence of childhood sexual abuse among men who have sex with men varied from 4% to 59%, with a median of 22% (16). Among the studies in this review that reported childhood sexual abuse, rates varied from 13% to 51%, with a median of 29% (2;3;6;8;9;12;15;17-25). The review by Schafer et al. also found very high rates of childhood sexual abuse among HIV-positive men (47%-65%) (1).

Addressing the trauma of childhood sexual abuse may reduce sexual risk behaviours and improve mental health, substance use and other health outcomes for men who have sex with men.

## What We Found

### Sexual risk behaviours and HIV

A number of studies have explored the relationship between childhood sexual abuse, HIV and sexual risk behaviours. A 2012 systematic review of 12 studies published in the U.S. found that men who have sex with men with a history of childhood sexual abuse were more likely to be HIV-positive and more likely to engage in unprotected anal intercourse than men without a history of childhood sexual abuse (3). A cross-sectional study among men who attended a music festival in the U.S. found that those who had experienced childhood sexual abuse were at greater risk of acquiring

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HIV, and were three times more likely to be diagnosed with a sexually transmitted infection (STI) (2). A U.S. study among HIV-positive men who have sex with men did not find a significant difference in rates of unprotected anal intercourse between men with a history of childhood sexual abuse and men without (21); however, a qualitative study among HIV-positive non-gay-identifying African American men who have sex with men found that over half of participants believed their childhood sexual experiences contributed to the high-risk exploration of their sexuality (26).

Many studies explored mental health and substance use as mediators of sexual risk behaviours and HIV incidence. In a U.S. study of 4,295 HIV-negative men who have sex with men, 5% of those with a history of childhood sexual abuse seroconverted over 48 months compared to 3% of those without (27). In this study, depressive symptoms, heavy alcohol use, stimulant use and polydrug use also influenced sexual risk behaviours and HIV seroconversion (27). A 2009 study among Latino men who have sex with men found an association between childhood sexual abuse and HIV sexual risk behaviours due to the increased psychological distress they experienced because of childhood sexual abuse and discrimination (20). A similar study with 182 men in New York City found that those with a history of childhood sexual abuse reported more compulsive sexual behaviours and over 30% of those with a history of childhood sexual abuse experienced symptoms of post-traumatic stress disorder (17).

## Intimate partner violence

Four studies looked at the associations between childhood sexual abuse and being victims or perpetrators of intimate partner violence among men who have sex with men:

- Among 183 gay or bisexual men in Buffalo, 40% had experienced both childhood sexual abuse and adult sexual abuse. Researchers found in 22% of cases, adult sexual abuse was perpetrated by an intimate partner (6).
- In a U.S. study of 117 gay men, childhood sexual abuse was the strongest predictor of adult sexual assault (5).
- In a Seattle study with 166 HIV-positive men who have sex with men, participants who reported childhood sexual abuse were at higher risk of adult sexual abuse. The authors suggested that, since most participants had been diagnosed in their 20s and 30s, adult sexual assault may have led to their HIV seroconversion (28).
- In a U.S. study of 703 African-American men, intimate partner violence victimization in current relationships was associated

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with having had male sex partners and early-life sexual abuse; among men who had not disclosed male sex partners, there was no association. The study also found that, among all men who have sex with men, childhood physical and sexual abuse was associated with being a perpetrator of intimate partner violence (29).

Interestingly, in two U.S. studies in which the primary outcome was not childhood sexual abuse, those who had experienced childhood sexual abuse were greater than two times more likely to report experiencing partner abuse (4;30).

## Mental health and substance use

Four studies examined the associations between childhood sexual abuse and mental health and/or substance use in men who have sex with men:

- In a Canadian study of 498 men who have sex with men, those who had experienced childhood sexual abuse were four times more likely to have attempted suicide, and three times more likely to have a diagnosed mood or mental disorder (8).
- In a U.S. study of 871 women and gay men, those who reported childhood sexual abuse and adult rape experienced higher levels of psychological distress, suicidality, alcohol use and self-harming behaviours (18).
- In a study with 117 HIV-positive Black men who have sex with men and women in Los Angeles, men with early adversities (including childhood sexual abuse) were more likely to experience discrimination as adults, which put them at greater risk of depression. The authors also found that the relationship between childhood adversities and depression was affected by experiences of racial discrimination, HIV-related discrimination and chronic stress (7).
- In a study with 593 HIV-positive men who have sex with men, those reporting a history of childhood sexual abuse had higher levels of depression and anxiety and were more likely to have substance use issues (21).

Two studies specifically looked at the relationship between childhood sexual abuse and eating disorders:

- Among 383 men who have sex with men in Toronto, those who had a reported history of childhood sexual abuse were twice as likely to develop symptoms of disordered eating (9).

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- In a study of 193 men who have sex with men in New York City, those with a history of childhood sexual abuse were significantly more likely to have subclinical eating disorders than men with no history of childhood sexual abuse, regardless of depression and/or substance use (23).

Two U.S. studies found that specifically having been forced to have sexual intercourse in childhood was associated with mental health and/or substance use among men who have sex with men:

- Among 1,383 gay and bisexual men, those who experienced forced sex before age 18 were two times more likely to experience depression than individuals who did not report forced sex (4).
- A study conducted in four large U.S. cities distinguished between forced sex and consensual sex in childhood (defined as sex before age 18 that was not considered by the respondent to have been forced). Among 2,506 participants, those who experienced forced sex had the highest levels of psychological distress and substance use when compared to those who had experienced consensual sex and those who had not had any sex in childhood. Men in the consensual sex group had higher rates of substance use than men in the no-sex group; however there were no differences in the rate of depression between these two groups (19).

## Other health outcomes

Many articles found childhood sexual abuse to be associated with a number of other health outcomes:

- **Smoking:** In a cross-sectional study of 3,103 gay and bisexual men in Boston, childhood sexual abuse was significantly associated with current smoking and former smoking (31).
- **Dissociative symptoms:** Among 517 men who have sex with men, those who had experienced childhood sexual abuse reported higher levels of absorption (retreating to fantasy world), depersonalization (separation from one's self) and amnesia (memory disturbance) (32).
- **Sexual disorders:** In a survey of 576 men who have sex with men who had experienced childhood sexual abuse, 75% reported some degree of sexual dysfunction (including erectile dysfunction and low sexual desire) over their lifetime. Sixty-nine percent of participants also reported some degree of sexual paraphilia over their lifetime, including voyeurism, fetishism and frotteurism (33).

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## Antiretroviral medication adherence

We did not find any studies discussing the effects of childhood sexual abuse on antiretroviral adherence among men who have sex with men. One systematic review did report that people living with HIV who had a history of childhood sexual abuse have poorer antiretroviral therapy adherence than those without that history; however, this result was not specific to men who have sex with men (1). Childhood sexual abuse among men who have sex with men has been associated with poorer mental health and substance use issues, and these factors are associated with non-adherence to antiretroviral therapy (34).

## Interventions addressing sexual risk behaviours and mental health

HIV prevention and risk reduction interventions for men who have sex with men have largely neglected childhood sexual abuse (12;26). Only a small number of interventions have been developed to address the traumatic stress of childhood sexual abuse on HIV transmission risk.

A 2013 randomized control trial with bisexual African-American men in Los Angeles found a stress-focused sexual risk reduction intervention more effective than general health promotion in decreasing unprotected anal insertive sex and reducing depression symptoms at six month follow-up; however, there were no differences in unprotected anal receptive sex, number of sexual partners or diagnoses of post-traumatic stress disorder (10). A six session sexual health intervention (guided by cognitive behavioural approaches) targeting HIV-positive Latino and African-American gay and bisexual men in Los Angeles who had a history of childhood sexual abuse was able to decrease sexual risk behaviours at six-month follow-up; however, there were no significant differences in the number of sex partners or depressive symptoms (11). The authors highlight the importance in addressing sexual decision-making while being sensitive to histories of childhood sexual abuse and sexual minority status (11).

The EXPLORE study, conducted with HIV-negative gay men in six U.S. cities over 48 months, tested a behavioural intervention designed to reduce HIV acquisition and transmission (10 counselling modules delivered in one-on-one sessions) (12). Men with a history of childhood sexual abuse, regardless of whether they received the intervention or not, were at higher risk of HIV infection at follow-up (12). These findings suggest that this intervention had no effect in reducing the rate of HIV infection among men who have sex with men with a history of childhood sexual abuse.

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## What We Did

We searched Medline and PsycInfo using a combination of text terms (gay or men who have sex or homosexual\* or bisexual\* or MSM or queer) and [text terms (Child sexual abuse\$ or Childhood sexual abuse\$ or child molest\$) or MeSH terms (Child Abuse, Sexual or Adult Survivors of Child Abuse or Child Abuse)]. Reference lists of identified systematic reviews were also searched. All searches were conducted on April 6, 2016 and results were limited to English articles published from 2005 to present in high-income countries. The search yielded 251 references from which 32 studies were included. Sample sizes of primary studies ranged from 16 to 4,295.



## Factors That May Impact Local Applicability

All studies in this review were conducted in high-income countries, with the majority of studies conducted in the U.S. and Canada. Caution should be taken when interpreting the results, as history of childhood sexual abuse among men who have sex with men may have different health outcomes, depending on the socio-cultural environments of each setting.

### Rapid Response: Evidence into Action

The OHTN Rapid Response Service offers quick access to research evidence to help inform decision making, service delivery and advocacy. In response to a question from the field, the Rapid Response Team reviews the scientific and grey literature, consults with experts, and prepares a brief fact sheet summarizing the current evidence and its implications for policy and practice.

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