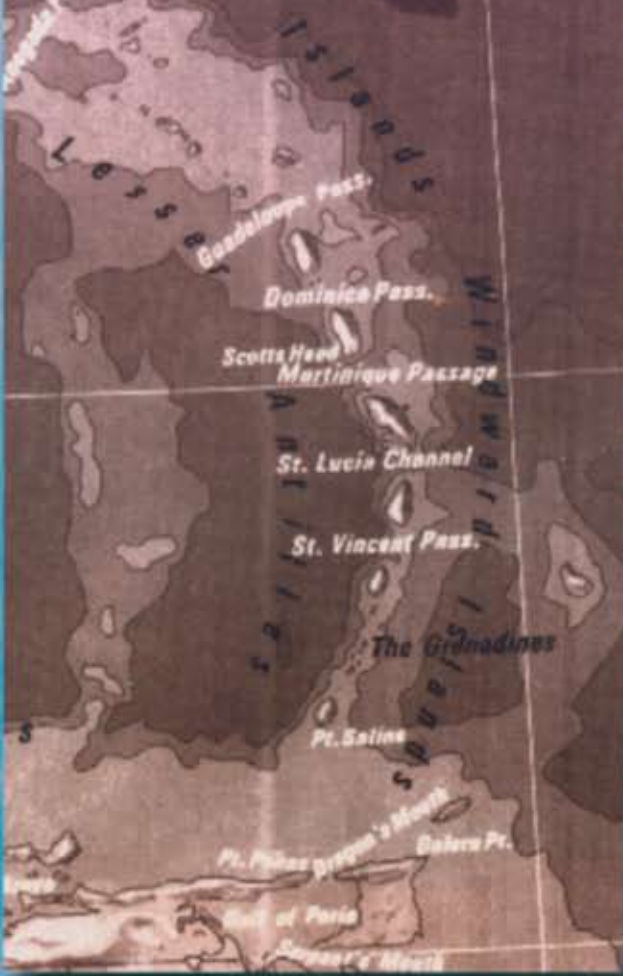


JOURNAL OF EASTERN CARIBBEAN STUDIES

Vol. 36, No. 4, December 2011



Sir Arthur Lewis
ISES
Cave Hill

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Subscription Rates are:	Barbados	BD\$96.00	per volume	BD\$24.00	per issue
	Caribbean	US\$68.00	per volume	US\$17.00	per issue
	International	US\$88.00	per volume	US\$22.00	per issue

Air Mail by special arrangement

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Cover design by Selwyn Cambridge.

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ISSN: 1028-8813

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Risk, Vulnerability and Gender in the Caribbean Context of HIV

Christine Barrow
Guest Editor

The twin epidemic of HIV and AIDS in the Caribbean shows little sign of abating and persists as an issue of personal, social and developmental concern. Medical interventions in testing, counseling and treatment have been successful, especially by prolonging the lives of persons living with HIV and reducing mother to child transmission. But behaviour change strategies for HIV prevention have been disappointing, despite intensive information and communication efforts such as Health and Family Life Education (HFLE) and mass media campaigns. Over the nearly three decades of HIV in Barbados, for example, rates of new infections increased, fluctuated and then dipped, but only slightly (Barbados 2012).

The articles in this collection were initially prepared as panel presentations at the 2009 Research Symposium organised by the Barbados National HIV/AIDS Commission (Barbados National HIV/AIDS Commission 2009). They address diverse issues and concerns around HIV and AIDS, providing new insights while reconfirming what we already know, and combining individual behaviour and risk perspectives with an emphasis on the structural drivers of HIV. The central focus on gender dynamics and power relations cuts across the collection, as authors report on HIV transmission from mother to child and a lowering of the gender gap as the proportion of women increases among those who test positive. Highlighted are the social and sexual vulnerabilities to HIV among women who live in poverty; who are burdened as single parents or stigmatised as care-givers for family members living with HIV; who are at risk of intimate partner violence;

Key words: HIV (Human Immunodeficiency Virus), gender relations, sexual-economic exchange relations, power, vulnerability

and who, as young girls, engage in unprotected sex to please their partners. Also addressed in the collection is the hypermasculinity of young men expressed in high risk sexual practices, including multiple partnering and sex under the influence of drugs and alcohol, as well as the HIV stigma and marginalisation of men who have sex with men (MSM).

Jakub Kakietek's content analysis of articles extracted from Barbadian newspapers over a ten-year span reveals a shift in public perception from linking HIV with marginalised groups of MSM and sex workers towards an association with innocent victims, mainly women and children. These 'narratives of innocence' portray children as powerless to prevent infection and therefore blameless, as are women in the context of gender inequality, violence and multi-partnering by their male partners. Thus the press participated in a public discourse that de-stigmatised HIV by disconnecting it from deviant sexual practices and marginalised groups and promoting the notion of a generalised epidemic with everyone vulnerable. But these perceptions are contradicted by surveillance reporting for Barbados that shows a persistent predominance of men among persons living with HIV and has yet to assess prevalence among MSM, though evidence from elsewhere in the Caribbean reveals high rates. Paradoxically, notions of a heterosexualised and feminised epidemic and the consequent scale-up of HIV testing and counseling in the general population, have made it difficult for response programming to maintain a special focus on populations at higher risk of infection; and so, they have been further marginalised. Repositioning HIV to mainstream sexuality, along with privileging a structural vulnerabilities frame, has also downplayed the role of individual agency and self-protection. Kakietek calls for data on HIV prevalence among MSM and other vulnerable groups as well as the wider population, and for research to combine risk and vulnerability perspectives.

The article by Anne St. John, Kemi Mascoll and Ira Waterman spotlights the success story of reduction in HIV transmission from pregnant mothers to their babies. In 1995, Barbados commenced the prevention of mother to child programme that included treatment with anti-retroviral drugs free of cost, counseling, follow-up clinical examinations, and tracking defaulting patients. During the 9-year period of the study, from January 2002 to December 2010, when 224 live births were delivered by HIV infected women, only 3 of the babies were infected and none of them died. The programme

thus reduced the mother to child transmission rate to 1.3%. The significance of the intervention is evident when assessed against the background of an estimated 30-35% transmission in the absence of treatment. The authors conclude that more needs to be done to reach the goal of zero transmission from mother to child.

The following paper turns attention to the vulnerabilities of women in the Caribbean context of HIV. Caroline Allen centers gender and sexual cultures as she explores the complex intersection of violence against women (VAW) and HIV risk in Barbados and Dominica. Surveillance data for the region reveal an increasing proportion of women with HIV and, although data on VAW as a cause and consequence of HIV is sparse, gender and cultural characteristics point to the link through high risk sexual practices such as the non-use of condoms, child abuse and early sexual initiation. Interviews with key stakeholders add depth to the analysis by identifying gender norms of dominant masculinity, male control over the female body, and justifications for male violence based on jealousy and disrupted sexual-economic exchange expectations. Women's and girls' risk of HIV infection are increased by multiple partnering, sexual-economic exchange relations and economic dependency on men – in particular in their choice of sexual partners who provide access to material goods and status, but who are also older and have a record of violence. This is set against a background of prevalent conflict and violence in family relationships and poor sexual communication between partners and between parents and children. Sex workers are among the most at risk of sexual violence from both clients and regular partners. However, despite a high level of awareness of the intersection between HIV and VAW in the lives of women and girls and willingness to make the connections, research, programming and service provision continue to separate the two and focus on either one or the other.

Jonathan Lashley and Jonathan Yearwood explore the links between drug use, unprotected sex and risk of Sexually Transmitted Infection/HIV infection among tertiary education students in Barbados. Drawing on international research on these issues, they construct a survey research model for the local context, factoring in variables relating to personal characteristics and campus environments. Findings revealed generally low levels of drug (but not alcohol) use although sexual activity-while under the influence-had occurred in one-fifth of the respondents. Risk behaviours were found to be

higher among males and on the more liberal open campuses, especially as regards early sexual initiation. Results also confirmed the so-called KAP gap – the paradox of high levels of knowledge of the importance of condoms and the persistence of alarming levels of unprotected sex. Casting new light on gender and youthful sexuality, the researchers report sexual refusal because no condom was available, with over half of the males indicating that their partners had insisted on condom use. Paradoxically, although females were more insistent on condom use (as well as having fewer sexual partners and being less likely to have sex while high or drunk), they had higher levels of unprotected sex because they also acquiesced to the wishes of their partners. These partners, furthermore, were on average five years older. The authors conclude with recommendations for research and policy that address gender and risk, sexual subcultures and contextual factors.

The volume concludes with a review of a recent publication entitled *Who Cares? The Economics of Dignity* co-authored by Marilyn Waring, Robert Carr, Anit Mukherjee and Meena Shivdas. Their research presents an intimate portrayal of the experiences of women, partners and friends who provide care, support and protection for persons living with HIV. Through their own words, we hear of the daily burdens, the stigma, the abuse and violence, and the economic dependency that characterises HIV care-giving. The authors present a compelling case for repositioning HIV carers from household obscurity to empowerment at the centre of HIV prevention response programming.

In today's environment of global economic recession, threatened cuts in HIV funding and indications of "AIDS fatigue", the importance of this collection lies in the authors' new insights into gender and social dimensions of HIV risk and vulnerability and the ways they demonstrate the value of their findings for building more responsive, strategic and targeted HIV policy and evidence-based programming to stem the tide of HIV and achieve the 'prevention revolution' (UNAIDS 2010).

References

Barbados. 2012. The Barbados HIV/AIDS Surveillance Report. Government of Barbados, Ministry of Health, HIV/AIDS Programme.

Barbados National HIV/AIDS Commission. 2009. 2009 Research Report: 'New Directions in HIV Prevention and Control in Barbados'. Barbados, Barbados National HIV/AIDS Commission.

UNAIDS. 2010. 2011- 2015 Strategy: Getting to Zero. Geneva, UNAIDS.

Narratives of innocence: framing AIDS in the Barbadian press, 1995–2004

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Abstract

This article examines how the press in Barbados and Barbadian public discourse defined the social groups most susceptible to HIV and AIDS and how the nature of their susceptibility was understood and described. Content analysis of 243 articles from Barbadian newspapers from 1995 through 2004 shows that the press discourse concentrated on nonproblematic social groups—women and children—as the principal victims of AIDS and emphasised structural societal vulnerability over individual risk. Those “narratives of innocence” were critical in shaping the public discourse and public health policy in Barbados.

Key words: heterosexualisation, narratives, same-sex sexual behaviours, stigma

Acknowledgements

I would like to thank Dr. Carole Jacobs from the National HIV/AIDS Commission and Ms Akiba Reid from the AIDS Foundation of Barbados for making their scrapbooks and press coverage clipping collection available to me. I would also like to thank Prof. Christine Barrow for her mentorship during my research tenure in Barbados and the Sir Arthur Lewis Institute for Social and Economic Studies (SALISES) for providing me with an institutional affiliation during that period of time. My fieldwork research was supported by the Social Science Research Council International Dissertation Research Fellowship with the funding provided by the Andrew W. Mellon Foundation.

Introduction

Examining public debates concerning HIV and AIDS is important because, as Howe (2000) noted, they frequently reveal as much about the structures of norms and values of the societies that produce them as they do about the disease itself. Often, claims about the nature of the public discourse surrounding AIDS in the Caribbean are based on anecdotal and fragmented evidence rather than on systematic data analysis. This article seeks to address this gap in the extant scholarship by presenting a systematic content analysis of articles from the Barbadian press over a 10-year span (1995 through 2004).

In what follows, I identify the dominant constellation of themes and arguments employed in the Barbadian press to understand and talk about the HIV/AIDS epidemic and describe it as “narratives of innocence.”¹ The narratives, I argue, were constructed on two levels: first, in terms of social groups defined to be (and not to be) infected with and affected by HIV/AIDS and second, in terms of causes and sources of their susceptibility to the disease. My analysis shows that the Barbadian press presented women, children, and youths as the primary victims of HIV/AIDS. This, I argue, served to deemphasise the connection between the disease and socially marginalised groups: men who have sex with men² (MSM) and commercial sex workers (CSW), who collectively defined the early public perception of HIV/AIDS (see for example, Howe, 2000). The underlying discourse of innocence juxtaposed homosexuals and prostitutes with mothers and children, and argued that HIV/AIDS affected primarily the latter. The narratives of innocence were constructed by showing that the disease no longer predominantly affected social groups and individuals who engaged in non-normative and therefore morally objectionable behaviors such as same-sex and transactional sex, but,

¹I borrowed this term from Professor E.R. ‘Mickey’ Walrond who used it when I interviewed him in 2009.

²In the remainder of this article I use the term men who have sex with men or MSM rather than gay or homosexual. Both ‘gay’ and ‘homosexual’ imply a certain degree of self-identification and, more importantly, dichotomies of straight-gay and homo-hetero sexualities. Empirical research has shown that such self-identifications and clear-cut dichotomies in male sexualities in the Caribbean are problematic (see for example, Murray, 2009; Padilla, 2009; cf. Gosine, 2009).

rather, it mostly affected social groupings that were socially and morally non-problematic.

On the second level, the narratives of innocence were constructed by emphasising structural factors—that is, factors over which individuals had no control—as the underlying causes of vulnerability to HIV/AIDS. For children, those factors included vertical transmission of HIV from mother to child. For women, those factors included gender inequality and the social and economic power disparities between women and men.

I argue that an implicit rationale guiding the narratives of innocence was to destigmatise HIV/AIDS and its victims by removing the association between the disease and behaviors viewed as immoral and by showing that AIDS could affect anyone and, therefore, it should be everyone's concern. I also argue that framing HIV/AIDS as everyone's concern was necessary for scaling up the response to the disease in Barbados from the mid-1990s through the present. At the same time, however, by circumscribing the public discourse, the narratives of innocence made it very difficult to rationalise efforts aimed at curbing the spread of HIV/AIDS in sexually marginalised populations.

Methods

I reviewed and coded 243 articles from the Barbadian daily press (*Barbados Advocate, Nation, and Sun*); published from February 1995 through May 2004, with the most complete coverage occurring from 1995 through 2003. A significant number of articles, especially the earlier ones, were made available through scrapbooks kept by the National HIV/AIDS Commission and the AIDS Foundation of Barbados. I supplemented that material with my own archival research.

I used the Attride-Stirling thematic networks framework as the principal analytic technique for content analysis (Attride-Stirling, 2001). All articles were coded with respect to the groups and individuals identified as affected by and susceptible to HIV/AIDS and how the nature, sources, and effects of susceptibility were understood. On the basis of the coded content, I identified overarching themes in how susceptibility to HIV/AIDS and its sources were described within each category of affected individuals, as well as themes linking discourses across different categories.

It should be emphasised that the press coverage analysed in this paper was not exhaustive, and I did not conduct a systematic archive search to identify all articles mentioning HIV/AIDS. Furthermore, while I often talk about the public discourse, I only analysed a part of its expression; namely, newspaper articles. Due to limited resources, I did not collect and analyse television and radio coverage of HIV/AIDS. Perhaps more importantly, this study did not include the public discourse surrounding HIV/AIDS outside the mainstream media. I argue, however, that the articles I analysed constituted a representative portion of the media discourse surrounding HIV/AIDS in Barbados.

Daily newspapers on the island report very high circulation and readership rates. The *Advocate* weekend edition has a circulation of 25,000 and an estimated 75,000 readers, which indicates that the newspaper is read by approximately 25% of the entire population of the country.³ The circulation of the *Nation* is even higher: the weekend edition circulates 51,440 copies.⁴ Therefore, I believe that the daily press both reflected and informed to a significant degree the broader public discourse of HIV/AIDS in Barbados. Most of the themes I uncovered in the newspaper articles were also present in the in-depth interviews I conducted with individuals involved in HIV/AIDS work in Barbados during my research period there (July– October 2009). I interpret this as further evidence that the newspaper coverage reflected the broader discourse regarding the disease on the island.

The narratives of innocence

The first dimension along which the narratives of innocence were constructed was defining who was, and was not, affected by HIV/AIDS. About half of the articles (134) contained a reference to susceptibility or vulnerable or infected individuals or groups. The two most common categories of persons identified as infected or at risk for infection were women and children.⁵

A total of 38 articles mentioned children in the context of HIV/AIDS. Nearly half of these articles (15) included recent statistics, such as the number of children infected on the island:

³The weekend edition. Source: *Barbados Advocate* www.barbadosadvocate.com

⁴Source: The *Nation* http://www.nationpublishing.com/general/quick_facts.html. Readership figures were not available.

⁵Out of the 243 articles, 134 included references to groups or individuals infected, affected,

Barbados is being faced with a raise [sic] in the number of women and children being infected by HIV, the virus which causes AIDS. ... Statistics also show that between July 1985 and June 1997, 65 children were born with HIV antibodies. ('More AIDS moms.' Advocate 2 Dec. 1997).

or world-wide:

UNAIDS says over 350 000 babies— most of them in Africa—are infected with HIV each year either during the bloody process of childbirth or from breast-feeding. ('True picture of infections.' Advocate 19 Nov. 1997).

A further 10 articles included general statements identifying children and their vulnerability to the epidemic, for example:

HIV-AIDS has the power to affect anyone, including the foetus still in the womb of an infected mother. ('Liberty fighting AIDS.' Advocate 7 Feb. 1996).

Four articles mentioned prevention efforts targeting children, two described charity functions and fundraising efforts supporting initiatives for children both infected and affected by HIV/AIDS, two referenced children in the context of the prevention of mother-to-child transmission (PMTCT), two included risk behaviors in children, and four involved children in other contexts related to HIV/AIDS.

Similarly, 34 articles mentioned women as either infected with HIV or at high risk for contracting the virus: more than a third (14 articles) mentioned HIV-positive women without any significant commentary or qualifying statements, for example:

or at risk for contracting HIV. Of those articles, 38 mentioned children, 34 mentioned women, 31 mentioned youths, 21 mentioned men, 17 mentioned MSM, 12 mentioned CSWs, and 14 mentioned other categories of individuals (prisoners, artists, drug users, migrants, refugees, foreigners, disable persons). In addition, 17 articles mentioned explicitly that HIV/AIDS was not affecting primarily MSM and 3 mentioned that it did not affect predominantly CSWs. In this article, due to space limitations, I focus on women, children, and MSM as the three groups most commonly mentioned as affected (and not affected) by HIV/AIDS. Of the articles I reviewed, 117 were published in the *Advocate*, 68 in the *Nation's Saturday Sun*, and 36 in the *Sunday Sun*. The name of the publication was missing for 18 articles I obtained from scrapbooks of the National HIV/AIDS Commission and the AIDS Foundation of Barbados.

[T]he crowd fell silent watching intently as they witnessed the ravage of the disease in one young woman. (‘Attention captured.’ *Advocate* 6 Nov. 1996).

[I]ncreasing number of women and children being affected by the disease continued to be a source of worry. (‘AIDS prevention in ‘your hands.’’ *Nation* 2 Dec. 1997).

or included the latest statistics disaggregated by gender:

[N]ine women were detected with the virus through public ante-natal clinics. (‘530 AIDS deaths. Nine children under 5 positive.’ *Advocate* 10 March 1996).

[N]umber of AIDS deaths —84 males and 25 females. In 1994, 79 men and 19 women died of AIDS complications. (‘Six lost to AIDS.’ *Sun* 23 June 1996).

Often HIV infection in women was presented in the context of motherhood, pregnancy, and PMTCT:

A woman’s life is more valuable than another because she is pregnant. (‘Free AZT for life’s sake? Hah!’ *Nation* 17 May 1995).

[N]early all of pregnant women in Barbados are being tested and there is no increase in the rate of HIV being found amongst them. (‘AIDS message hitting home.’ *Advocate* 21 Sept. 1997).

Commonly, such statistics were interpreted as an indicator that women in Barbados constituted one of the high-risk groups, or even the principal high-risk group for HIV infection.

[Sara] Adomakoh said although stigmatisation and discrimination had significantly declined in comparison to five years ago, these factors still challenged the successful outcome of treatment, care, and targeted prevention of the core groups at risk—single young females, homosexuals, and sex workers. (‘Big threat to HIV/AIDS fight.’ *Sun* [date not available] 2001).

Furthermore, the growing number of women infected with HIV was interpreted as the growing heterosexualisation of the HIV/AIDS epidemic in Barbados.

There is a heterosexual epidemic in Barbados. The ratio is about two (males) to one (female)'' said Jacobs, noting that the initial pattern of the infection was seven males to one female. ('Deadly trend: One AIDS death every three days, says advisory committee.' Nation 9 Oct. 1995).

Interestingly, this interpretation contrasts sharply with epidemiological data. The gender ratio of HIV infections in Barbados has indeed shifted dramatically since 1984 but even to date, there are more male than female cases (Government of Barbados, 2008). Thus, even though the HIV/AIDS epidemic in Barbados has been feminising, as the proportion of female cases has increased, it has not **feminised**; that is, the number of HIV/AIDS cases has never been higher in women than it was in men. Therefore, statements suggesting that women constituted the majority of HIV infections in Barbados were inaccurate, and claims that HIV/AIDS affected mainly women were made despite and contrary to the epidemiological evidence that showed otherwise. Some articles that mentioned gender ratios as skewed very visibly in the direction of men, nevertheless editorially insisted that HIV/AIDS affected mostly women:

In Barbados, and the Caribbean AIDS is primarily a heterosexual disease affecting women in a disproportionate manner ... in Barbados, one in every three people affected by HIV/AIDS is a woman. This is up from one in seven five years ago. In the wider Caribbean it is one-to-two ratio. ('Women epidemic's main victims.' Nation 12 April 1996).

The second dimension of the narratives of innocence was the way the sources of susceptibility of those infected and at risk were presented. Specifically, discussing vulnerability, the press coverage emphasised factors that were beyond the control of individuals: structural inequalities for women and vertical transmission from mother to child for children.

Articles mentioning children rarely described explicitly or qualified the nature of their vulnerability to HIV/AIDS. However, clearly implied was the fact that children in Barbados, and elsewhere in the world, were infected through vertical transmission of HIV from their mothers. One article quoted

the then Minister of Health, Liz Thompson, saying that '*research indicates that many of your children start having sex at age seven*' ('AIDS worry Thompson.' *Nation* 27 March 1995). However, that statement was quickly condemned, and the *Nation* published a letter-to-the-editor in which the author argued that '*behavior of the minority of children is cast as if it were a norm*' ('Research AIDS properly' *Nation* 29 March 1995). More consistent with the general spirit of the press coverage concerning children and HIV were statements such as:

[S]everal young women were paying close attention to Dr. Jacobs' warnings that pregnant women carrying the HIV-AIDS virus could pass the disease to their innocent babies. ('Attention captured.' *Advocate* 6 Nov. 1996).

[M]any young children are victims of sexual abuse within the home. ([No title], *Advocate* 13 Oct. 1995).

These statements emphasised that children were innocent victims and had no agency in and responsibility for their HIV infection. This ubiquity of and emphasis on infections in children, even in the absence of an explicit discourse of blamelessness, was a constitutive part of the narratives of innocence that dominated the public perception of HIV/AIDS in Barbados.

The discourse about the sources of women's vulnerability emphasised gender inequality on both the collective and the individual levels. One article mentioned biological susceptibility:

[F]or one thing, women are generally biologically more vulnerable than men. ('High risk.' *Advocate* 14 Oct. 1995).

In general, however, press coverage focused on power and economic disparities between men and women as the causes underlying women's vulnerability to the disease.

[G]ender inequality— vicious cycle that links AIDS with gender inequality. ('We need to face the grim reality of HIV/AIDS.' [date not available] 2002).

[W]omen's vulnerability to AIDS ... stems from a cycle of neglect which limits their access to education, decision-making positions, and the tools

for economic empowerment. ('Women epidemic's main victims.' *Nation* 12 April 1996).

[Adomakoh] She noted that the impact of HIV/AIDS on women has been particularly acute with 74 percent of those interviewed having faced stigmatization in their relationships because of their gender and poverty, even before they became infected. ('Big threat to HIV/AIDS fight.' *Sun* [date not available] 2001).

Similarly, articles describing stories of individual women affected by or infected with HIV described factors over which the women did not have any control. Most often, women were presented as victims of abusive and dishonest men.

*Her life, like the struggling stalk of Snow on the Mountain, has been rock hard—to stand against the beatings, the criticism, the abandonment, and the poison in her body, left by her last man. When he went off with a better-looking woman, he was the third to go. The 30-year-old woman's three daughters are all that remain of her dreams of being loved, protected, of having family and home. [in a separate line] Maggie is HIV positive. ('Mummy's last xmas ... if her prayers fail her.' *Sun* 15 Dec. 1996).*

*For the first four months they used condoms. But the young man convinced her to trust him. The last two months of their six-month affair, they enjoyed unprotected sex. ... He became abusive and demanding, she says. She told him it was over. His parting shot? He told her he had the HIV virus and that he had it when they first met. ('Sex crime? Man may face charges for spreading HIV. She says if she has AIDS, she'll sue.' *Sun* 7 Dec. 1997).*

It is worth noting the striking contrast between the way women in Barbados were described in the context of HIV/AIDS and the way they were perceived in the context of sexually transmitted infections (STIs) in the early twentieth century. In her essay 'A Benign Place of Healing', Denise Challenger (2009) shows that women, especially black women, were considered to be 'infectious agents' primarily responsible for the spread of STIs:

In the post-slavery period, the CDA [Contagious Diseases Act] discourse contributed to a subtle shift in the depiction of poor Afro-Barbadian female bodies. They became subjects who acted upon

the social system and, through their actions, infected the black and white members of the British West Indian Regiment (Challenger, 2009, p. 102).

In contrast, in the Barbadian press coverage of HIV/AIDS women were represented as ‘infected objects.’ In Challenger’s account of STI politics in Barbados, the public and policy discourses emphasised the need to limit the excessive agency of women in the interest of public health. The coverage of an STI a century later has emphasised the lack of women’s agency as a public health problem.

I argue that, in both instances, agency needs to be understood in close relation to blame and responsibility. To account for the rampant spread of STIs among the troops, the metropolitan government removed the blame from the West Indian Regiment in particular, and from male bodies more broadly, and framed them as blameless victims of the infectious agents—colonial non-white women. Stemming from the nineteenth century’s conceptualisation of the biology of STIs (Mayes, 2009; Challenger, 2009), the CDA stripped men of agency to take away their blame and, consequently, their responsibility for the spread of STIs. In the context of HIV/AIDS, in order to remove blame from women who were becoming infected with HIV, the Barbadian press emphasised their lack of agency and powerlessness in preventing the infection.

This removal of blame by denying the agency to individuals and groups affected by HIV/AIDS is the defining rationale informing the narratives of innocence. In a situation when sex and sexuality are subject to moral judgments, and where non-normative sexual behaviors are sanctioned socially and sometimes criminally, the only way a sexually transmitted disease can be discussed without condemnation is when the victim is infected against her will; that is, when she lacks the agency, and thus responsibility, to do anything to prevent the infection. This rationale is also reflected in how socially and sexually marginalised groups were covered in the Barbadian press in the context of HIV/AIDS.

Elephants in the room

One clear implication of presenting women and children as the groups that

are mostly affected by the epidemic is the emergence of an understanding that HIV/AIDS in Barbados was generalised and heterosexual. The fact that women and children were getting infected with HIV was generally interpreted as an indication that the epidemic no longer affected predominantly other social groups, in particular men who had sex with men. In fact, 15 articles argued explicitly that HIV/AIDS in Barbados is not a 'homosexual epidemic', often precisely because women and children were becoming infected.

Even though it is well known that AIDS is not just a disease [sic] of homosexual people, (it can be transmitted to even new borns [sic]) the knowledge has done little to raise sympathy levels in the society at large. ('One World, One Hope— theme for World AIDS Day.' Sun 1 Dec. 1996).

Nowadays perceptions have changed dramatically since most people who contract the Human Immunodeficiency Virus (HIV) and go on to develop AIDS lead heterosexual lifestyles. ('AIDS Still a Puzzle to Medical Science.' Sun 1 Dec. 1996).

It must be emphasised that interpreting the growing number of HIV infections in women and children as a sign of heterosexualisation of the epidemic took place in the absence of epidemiological data about the prevalence of HIV among men who have sex with men. In fact, such data have not yet been collected. Furthermore, just as presenting the HIV/AIDS epidemic as 'affecting women in disproportional manner' despite a lack of epidemiological evidence, so was interpreting the growing absolute **number** of HIV/ AIDS cases as an indicator that the general— that is, heterosexual—population is at higher **risk** for infection than MSM. Because heterosexuals comprise a large majority of the overall population, they naturally also constitute a large percentage of total HIV infections. This, however, does not mean that the prevalence, that is, the percentage of the heterosexual population infected with HIV, is higher than prevalence among men who have sex with men. If the prevalence among heterosexuals and MSM was the same, the distribution of HIV/AIDS should reflect the distribution of heterosexual individuals and MSM in the general population. For example, if the latter constituted 2% of the overall population and the likelihood of contracting HIV was the same for a heterosexual person and for a man who has sex with other men, we would expect 2% of cases of HIV/ AIDS to be attributable to same-sex sex.

Estimating the proportion of men who have sex with men in the general population is difficult, methodologically challenging, and often very politicised (Bogaert, 2004). The seminal study of Alfred Kinsey and colleagues (1948) estimated the prevalence of same-sex sexual behaviors in men in the United States at about 10%. This figure has since been widely contested as too high and is considered, at best, the upper-bound estimate in both academic literature (Sell, Wells, and Wypij, 1995) and non-academic debates (Barbados Evangelical Association, 2001).

HIV prevalence rates among MSM were quoted in the press, such as

90 percent of the persons with AIDS was attributed to heterosexual contact and 5 percent to homosexual/bisexual contact. ('More Bajans taking HIV tests.' *Nation* 12 Sept. 1997).

This suggest that either MSM constitute an unusually high proportion of the Barbadian population (about 8%, in line with Kinsey et al. estimates)⁶ or, more likely, that the prevalence of HIV is higher among MSM than in the general population. The distinction is technical and subtle, but it has crucial implications for prevention efforts, which I will discuss below.

A total of 17 articles mentioned men who have sex with men as affected or infected by HIV/AIDS. Four of the articles focused on men who have sex with men in and outside of Barbados (in North America and elsewhere). Another three mentioned homosexuality in the narrow context of HIV/AIDS in prison and the debate about distribution of condoms to inmates. Five articles mentioned same-sex sexual behaviors as a component of the general statistics of the epidemic in Barbados and all of them emphasised the limited number of infections attributable to same-sex sex, for example:

[O]nly 11 percent of [new cases] were of homosexual/bisexual origin. ('AIDS myth dying.' *Advocate* 3 April 1995).

⁶Since same-sex sex between women is considered to have a minimal risk for HIV transmission, we should expect that all of the 5% of the HIV infections resulting from 'homosexual/bisexual contact' should be among men. The gender ratio in 1997 was roughly 2 men to 1 woman; thus, about 66% of the cases were among men and 33% among women. Because none of the women contracted HIV through same-sex sex, all of the cases of same-sex sexual transmission were among the men. Therefore, about 7.6% of cases among men were attributed to same-sex sex.

90 per cent of the individuals contacted the virus through heterosexual contact, while only five per cent became infected as a result of homosexual or bisexual contact. ('More Bajans taking HIV tests.' *Nation* 12 Sept. 1997).

... a whopping 92 per cent of new cases testing positive for HIV virus occurred as a result of heterosexual contact, while homosexual/bisexual-related cases comprised only 3.64 percent of the total number of cases in this category. ('Educate through billboards.' *Advocate* 23 March 1998).

Two articles mentioned homosexuality and gay men as part of the coverage of health fairs held as part of AIDS Awareness Week events. One article mentioned a gay couple who got tested for HIV:

Homosexual couples who were also queuing attracted attention and comments. 'Dem Bills [sic] (homosexuals!)' said one middle aged woman in a lowered voice. There were a few here. I saw them. Anyhow, I still think they did the right thing. Another replied, in a much louder voice: I don't care about homosexuals; I don't care about lesbians. They can't do me anything. It's the bisexual men. ('Testing time at health fair.' *Nation* 8 April 1997).

and another:

... a young man attending a workshop on peer counseling organised by CAREC and C-Flag (Caribbean Friend of Lesbians and Gays).⁷ ('United front.' *Advocate* 11 Nov. 1996).

Three articles reported on the establishment and subsequent activities of United Gays and Lesbians Against AIDS Barbados (UGLAAB)—an organisation set up in December 2001. Interestingly, the coverage of UGLAAB and interviews with its leaders, Darcy Dear and David 'Didi' Winston, emphasised the vulnerability of gay men to the impact of HIV/AIDS rather than their susceptibility—that is, increased risk for HIV infection.

Dear explained that in the gay community not only do partners face the loss of a companion, but because there are no laws recognizing such

⁷The young man mentioned in the article assured the interviewer and the readers: What you must understand is that not every member of C-Flag is lesbian or homosexual ('United Front.' *Advocate* 11 Nov. 1996).

relationships, the bereaved partner may be turned out from the shared home by the deceased's relatives. ('HIV/AIDS issues easier for 26.' Nation 25 April 2002).

Similarly, Didi Winston was

... especially troubled by the social treatment of the gay community which may have serious health repercussions. ('Lean on me.' Nation 1 Dec. 2001).

Surprisingly, even the coverage of UGLAAB failed to mention that gay men are at a higher risk of infection, either because of the biology of anal sex or because of the high prevalence of HIV among MSM. In fact, some of the articles covering UGLAAB emphasised that the focus of the organisation is not only the LGBT community but also the general Barbadian population:

The Association [UGLAAB] was conceptualised in February last year by Messers. Darcy Dear and David 'Didi' Winston, who felt that there was a need for representation as they look to tackle the HIV/AIDS epidemic not only in the gay community but for all sexually active persons ('UGLAAB tackles AIDS.' Advocate 18 Sept. 2002).

Therefore, I argue, even the coverage of gay-specific events attempted to heterosexualise HIV in Barbados.

It is striking that only one out of the 243 reviewed articles explicitly identified men who have sex with men (together with young women) as a high-risk group for HIV infection:

Adomakoh said although stigmatisation and discrimination had significantly declined in comparison to five years ago, these factors still challenged the successful outcome of treatment, care, and targeted prevention for the core groups at risk—single young females, homosexuals, and sex workers. ('Big threat to HIV/AIDS fight.' Sun [no date available] 2001).

One article stands out in the way men who have sex with men were described in the context of HIV/ AIDS:

Don believes that he contracted the virus from his current partner, with whom he has been living for several years. The two have resigned themselves to 'being there for each other' until the inevitable end. ... The experiences of his gay adult life, however, are what Don wants Barbadians to remember: the bars of Suttle Street, the multiple partners and unprotected sex, the gay and lesbian parties in private residences around Barbados, attended by some very respected professional people who pass you on the street the next morning with their wives as though they don't know you from the night before. There is a lot of guys out there who have the virus and they don't think twice about spreading it. They deliberately get involved with people who don't know they have AIDS. ('From almhouse to AIDS.' Nation 15 March 2002).

First, the story of Don's infection is surprisingly free of moral judgment. Unlike the story of the young woman who contracted the virus from her boyfriend and threatened to sue him, Don and his partner, who infected him, 'are there for each other.' ('Sex Crime? Man May Face Charges for Spreading HIV. She Says if She Has AIDS, She'll Sue.' Sun 7 Dec. 1997, see above). What is significant is not that Don does not blame his partner for infecting him, but rather that the discourse of blame is absent from that section of the article. Another significant distinction between this and other articles mentioning men who have sex with men in the context of HIV/AIDS is what I consider an unusual honesty with which the complexity of male sexuality and sex behaviors are presented: married men who also have male sex partners; problems with serostatus disclosure; intersection of class, social status, and male sexualities; and the stigmatisation of HIV in gay communities (Murray, 2009; Padilla, 2007). However, this article is clearly an exception and stands in sharp contrast to the overall press coverage regarding HIV/AIDS and men who have sex with men.

Stigma, responsibility, and the implications of innocence

In his analysis of press discourse surrounding AIDS between 1985 and 1991, Howe (2000) pointed out that, in that period of time, the Barbadian press tended to sensationalise HIV/AIDS and present it as a 'disease of sexual perverts' (Howe, 2000, p. 48). A decade later, I argue, the press discourse surrounding HIV/AIDS shifted dramatically. By constructing the narratives of innocence, the Barbadian press participated in an effort to destigmatise the disease and the people it affected, direct attention to the growing threat to

public and individual health posed by HIV/AIDS, and mobilise the decision makers within and without the government to take steps to respond to the epidemic.

The narratives of innocence are particularly important because, I argue, they constitute the dominant interpretive framework within which HIV/AIDS in Barbados has been understood and talked about. Scholarship in political science has shown a mutually constitutive relationship between public perception and public policy (Schneider and Ingram, 1993). Therefore, I argue, the narratives of innocence were informed by but also informed public policymaking with respect to HIV/AIDS. The tropes and themes I identified in the press were also present in interviews I conducted with politicians, civil servants, clinicians, representatives of the civil society, the religious community, and the private sector during my field research in Barbados in 2009.

In fact, the configuration of HIV/AIDS policymaking in Barbados corresponded very closely with the parameters of HIV/AIDS delineated by the narratives of innocence. To halt the increasing number of HIV infections in children, in 1996 a prevention of mother-to-child transmission program was launched. This program included the provision of Zidovudine (AZT), an effective way to prevent neonatal vertical transmission, which was made available free of charge to all HIV-positive pregnant women. Unpublished results of a study conducted between 2002 and 2006 showed a reduction in the rate of HIV transmission from mother to child from 27.1% to 2.5% (Policy Document on the Prevention of Mother-to-Child Transmission of HIV in Barbados, 2009). This arguably most-successful part of the Barbadian response to HIV/AIDS targeted women and children—identified by the narratives of innocence as the primary victims of the epidemic.

In 2001, antiretroviral therapy (ART) was made available free of charge for all patients with advanced HIV infection. Following the introduction of ART, clinical outcomes in HIV patients improved dramatically: AIDS mortality fell from 90 cases in 2001 to 60 in 2002 and 43 in 2003 (Barbados Ministry of Health, Government's Policy on HAART presentation). In terms of prevention, massive education and information campaigns directed at the general population have produced significant increases in knowledge about the disease and its modes of transmission (Ministry of Education, Youth Affairs, and Sports, 2001; 2004; 2006).

I believe that, without the emergence of the narratives of innocence, the scaling up of the response to the epidemic in Barbados would have been much more difficult, if not impossible. At the same time, however, narratives of innocence made it very difficult to prioritise not only interventions, but even research among the ‘non-innocent’: commercial sex workers and, especially, men who have sex with men. Ironically, an effort to avoid labeling men who have sex with men as ‘dangerous through their association with improper gendered and sexual behavior’ (Murray, 2009, p. 118) rendered them ‘unmentioned and unmentionable’ (Murray, 2009, p. 119). In its insistence to reduce stigmatisation of HIV/AIDS through heterosexualising it and emphasising broader structural vulnerabilities, the Barbadian press marginalised the epidemic in already marginalised populations. This has also been reflected in policy priorities and policy actions.

It is shocking that a quarter century into the epidemic, which perhaps might have started with MSM, no study examining HIV prevalence or sex behaviors in this particular population has been conducted in Barbados.⁸ Evidence from a seroprevalence study of MSM in Trinidad and Tobago, which showed that 20% of participants were infected with HIV (Lee *et al.*, 2005), suggests that the extent and effects of the epidemic need to be urgently assessed among MSM in Barbados. However, the dominant understanding of HIV/AIDS on the island as heterosexual and feminised makes prioritising research on MSM very difficult to rationalise. Furthermore, a concern that increased attention given to HIV among men who have sex with men would lead to further stigmatisation of both HIV/AIDS and same-sex sex complicates matters even more. During discussions regarding the formulation of the new National Strategic Plan that I attended in September 2009, it was suggested that all men, rather than men who have sex with men, should be defined as a high-risk group precisely to decrease stigmatisation of MSM. While this may seem a noble intent, men who have sex with men and men who have sex with women have different prevention needs and require different targeted interventions. Defining all men, rather than men who have sex with men, as a high-risk group limits and dilutes the capacity of governmental and nongovernmental agencies to respond to the needs of MSM at risk for HIV infection.

⁸ A survey of sexual behaviors and attitudes in Barbadian men: Men’s Lifestyle Survey was allegedly completed in 2007 by AID Inc. However, the results of the survey have not been released to date.

The tendency in the recent social-scientific scholarship on HIV/AIDS is to dismiss risk-based ways of thinking about HIV/AIDS, which focus on individual behaviors, in favor of vulnerability-based approaches, which, in turn, emphasise structural factors as determinants and constraints of individual choices. For example, Nanton argued that ‘the risk framework has become increasingly recognized as a limited and tainted one’ and that the ‘concept of vulnerability offers a potential replacement’ (Nanton, 2009, p. 138).

This article seeks to contribute to the discussion on vulnerability and risk in the context of HIV/AIDS in two ways. First, chronology-wise, while the scholarship on HIV/AIDS in the Caribbean seems to suggest that the focus on structural causes of vulnerability is fairly recent (Barrow, de Bruin, and Carr, 2009), my review of the Barbadian press demonstrates that, at least for women, structural factors have been a focus of discussion for more than a decade.⁹

Second, this article points to a dilemma inherent in the vulnerability versus risk dichotomy. On the one hand, focusing on individual responsibility can lead to the stigmatisation of the disease and the people it affects by linking them to behaviors considered non-normative and therefore objectionable. On the other hand, focusing on structural vulnerability rather than individual responsibility can limit the debate regarding HIV/AIDS to mainstream sexualities and effectively remystify the disease. Murray points out that ‘in places where same-sex sexuality is only publically discussed in relation to an HIV framework, sexual minorities come to matter only in terms of causing or alleviating HIV,’ which in turn ‘perpetuates a reductive understanding of these groups’ sexual identities to something that is primarily associated with a dangerous disease’ (Murray, 2009, p. 118–119). However, as my analysis of press coverage shows, the effort to destigmatise HIV/AIDS by removing the link between same-sex sex and HIV/AIDS from public debate, instead of widening the discourse on human sexuality, actually narrowed the discourse on AIDS and made it all but impossible to discuss the needs of men who have sex with men and women and men who have transactional sex in the context

⁹ I have found articles focusing on structural determinants of women’s susceptibility to AIDS as early as 1995.

of HIV. Similarly, the emphasis on the structural vulnerabilities driving HIV infections in women served to sanitise the discourse about HIV/AIDS in Barbados by detaching it from individual sexual acts. At the same time, however, it has undermined individual agency and individual capability to protect oneself from the virus.

On the praxis level, this article points to a need to reevaluate the prevailing understanding of HIV/AIDS in Barbados and the resulting policy priorities. I believe it is necessary to examine which parts of our understanding of the epidemic are based on scientific data and which parts stem from normative concerns. Compared to other developing countries, Barbados has sufficient material resources, human capital, and infrastructure to conduct high-quality research, as was demonstrated by systematic surveys of knowledge, attitudes, beliefs, and practices (KABP) among nationally representative samples of youth (Ministry of Education, Youth Affairs, and Sports, 2001; 2004; 2006) as well as other contributions in this volume. After the successful scaling-up of treatment, prevention has become the main focus of the efforts to curb the HIV/AIDS epidemic on the island. While this view may be criticised as overly biomedical or risk-based, I believe that to ensure that energies and resources directed at fighting the disease are on target, it is imperative for the National HIV/AIDS Commission, the Ministry of Health, and Barbados' regional and international partners to establish reliable prevalence estimates in the general population, as well as in the groups that might have heightened risk for infection such as men who have sex with men, commercial sex workers, prison inmates, and to soon understand both structural AND individual determinants of sex behaviors that put people at risk of contracting HIV.

References

- Attirde-Stirling, J. (2001), *'Thematic networks: an analytic tool for qualitative research.'* *Qualitative Research* December(1): 385-405.
- Barbados Evangelical Association (2005). 'Faith, Hope, Love, and Human Sexuality.' September, 2009
<http://www.caribbeanevangelical.org/programmes/#>
- Barrow, Ch. (2009), 'Contradictory Sexualities: From Vulnerability to Empowerment of Adolescent Girls in Barbados', in Barrow, Ch., de Bruin, M., and Carr, R. (eds.) *Sexuality, Social Exclusion, and Human Rights*. Kingston and Miami: Ian Randle Publishers. pp: 215-238.
- Barrow, Ch., de Bruin, M., and Carr, R. eds. (2009), *Sexuality, Social Exclusion,*

- and Human Rights*. Kingston and Miami: Ian Randle Publishers.
- Bogaert, A. (2004). The prevalence of male homosexuality: the effects of fraternal birth order and variations in family size. *Journal of Theoretical Biology* 230(1):33-7.
- Challenger, D. (2009). 'A Benign Place of Healing. The Contagious Diseases Hospital and Medical Discipline in Post-Slavery Barbados.' in De Barros, J., Palmer, S. and Wright, D. (eds.) *Health and Medicine in the circum-Caribbean, 1800-1968*. New York and London, Rutledge. pp: 98-120.
- Gosine, A. (2009). 'Speaking Sexuality: The Heteronormativity of MSM,' in Barrow, Ch., de Bruin, M., and Carr, R. (eds.) *Sexuality, Social Exclusion, and Human Rights*. Kingston and Miami: Ian Randle Publishers. pp: 95-115.
- The Government of Barbados. (2008). UNGASS Country Progress Report. United National Joint Programme on AIDS.
- Howe, G. (2000). 'Press and Public Reactions to HIV/AIDS in Barbados since 1984.' in Howe, G. and Cobley, A.(eds.) *The Caribbean AIDS Epidemic*. Barbados, Jamaica, Trinidad and Tobago: University of the West Indies Press. pp. 42-56.
- Kinsey, A, Pomeory, W. and Martin, C. (1948). *Sexual Behavior in the Human Male*. Philadelphia: W. B. Saunders Co.
- Lee, R., Poon-King, C., Legall, G., Trotman, C., Samiel, S. and O'Neill, C. (2005). Risk behaviours for HIV among men who have sex with men in Trinidad and Tobago., AIDS 2006 - XVI International AIDS Conference: Abstract no. CDD0366.
- Mayes, A. (2009), 'Tolerating Sex. Prostitution, Gender, and Governance in the Dominican Republic, 1880s-1924.' in De Barros, J., Palmer, S. and Wright, D. (eds.) *Health and Medicine in the circum-Caribbean, 1800-1968*. New York and London, Rutledge. pp. 121-141.
- Murray, D. (2009), 'Positively Limited: Gender, Sexuality, and HIV and AIDS Discourses in Barbados.' in Barrow, Ch., de Bruin, M., and Carr, R. (eds.) *Sexuality, Social Exclusion, and Human Rights*. Kingston and Miami: Ian Randle Publishers. pp: 116-129.
- Nanton, P. 2009. HIV and AIDS, Vulnerability and the Governance Agenda: A Critical Perspective on Barbados. in Barrow, Ch., de Bruin, M., and Carr, R. (eds.) *Sexuality, Social Exclusion, and Human Rights*. Kingston and Miami: Ian Randle Publishers. pp. 277-294.
- Padilla, M. 2007. *The Caribbean Pleasure Industry*. Chicago, IL: Chicago University Press.
- Pisani, E. 2007. *The Wisdom of Whores: Bureaucrats, Brothels, and the Business of AIDS*. New York and London: W.W. Norton and Company.
- Sell, R., Wells, J., and Wypij, D. (1995), 'The prevalence of homosexual

behavior and attraction in the United States, the United Kingdom and France: results of national population-based samples.' *Archives of Sex Behavior* 24(3):235-48.

Press articles

'530 AIDS deaths. Nine children under 5 positive.' *Advocate* 10 March 1996.

'AIDS message hitting home.' *Advocate* 21 Sept. 1997.

'AIDS myth dying.' *Advocate* 3 April 1995.

'AIDS prevention in 'your hands'.' *Nation* 2 Dec. 1997

'AIDS still a puzzle to medical science.' *Sun* 1 Dec. 1996.

'AIDS worry Thompson.' *Nation* 27 March 1995

'Attention captured.' *Advocate* 6 Nov. 1996.

'Big threat to HIV/AIDS fight.' *Sun* [no date available] 2001.

'Deadly trend: One AIDS death every three days, says advisory committee.' *Nation* 9 Oct. 1995.

'Educate through billboards.' *Advocate* 23 March 1998.

Free AZT for life's sake? Hah!' *Nation* 17 May 1995.

'From almhouse to AIDS.' *Nation* 15 March 2002)

'High risk.' *Advocate* 14 Oct. 1995.

'HIV/AIDS issues easier for 26.' *Nation* 25 April 2002.

'Lean on me.' *Nation* 1 Dec. 2001.

'Liberty fighting AIDS.' *Advocate* 7 Feb. 1996.

'One World, One Hope—theme for World AIDS Day.' *Sun* 1 Dec. 1996.

'More AIDS Moms.' *Advocate* 2 Dec. 1997.

'More Bajans taking HIV tests.' *Nation* 12 Sept. 1997.

‘Mummy’s last xmas ... if her prayers fail her.’ *Sun* 15 Dec. 1996.

No title, *Advocate* 13 Oct. 1995

‘Research AIDS properly.’ *Nation* 29 March 1995

‘Sex crime? Man may face charges for spreading HIV. She says if she has AIDS, she’ll sue.’ *Sun* 7 Dec. 1997

‘Six lost to AIDS.’ *Sun* 23 June 1996.

‘Testing time at health fair.’ *Nation* 8 April 1997.

‘True picture of infections.’ *Advocate* 19 Nov. 1997.

‘UGLAAB tackles AIDS.’ *Advocate* 18 Sept. 2002.

‘United front.’ *Advocate* 11 Nov. 1996.

‘We need to face the grim reality of HIV/AIDS.’ [no date available] 2002.

‘Women epidemic’s main victims.’ *Nation* 12 April 1996.

Further Reduction in Mother-To-Child Transmission of HIV in Barbados following intervention with HAART.

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Abstract

From January 2002 to December 2010, a historical prospective study was carried out involving consenting HIV infected pregnant women who were treated with anti-retroviral drugs for PMTCT prophylaxis. Infants received a week of oral zidovudine or single dose nevirapine plus one month of zidovudine. Mothers and infants were followed-up after discharge and tested for HIV. The transmission rate in treated pregnant women was calculated, with statistical analysis using the Fisher Exact Test. There were 22,859 live births, 224 delivered by infected pregnant women and 3 (1.3 %) infected infants. The intervention using ART protocols in HIV infected pregnant women has resulted in the most significant reduction in transmission rate to date.

Key words: Mother-To-Child Transmission of HIV, PMTCT HIV HAART Barbados, PMTCT prophylaxis Barbados.

Acknowledgements

We thank all medical and nursing staff of the Paediatric unit of the Queen Elizabeth Hospital, and the Ladymeade Reference Unit, who assisted with tracking, care and follow-up of patients during this study. We also thank the anonymous referees for their comments and suggestions.

Introduction

The impact of the Human Immunodeficiency Virus (HIV) epidemic continues to devastate the populations of many countries worldwide. Despite this, there is evidence that the adverse effects of the disease on populations has stabilised in several countries where the effects of the disease has been felt the most. The highest adult prevalence (age group 15-49 years) is still reported from the Sub-Saharan region of Africa. The Caribbean region remains rated as having the second highest prevalence of HIV in adults.

The 2010 edition of the UNAIDS Report on the global AIDS epidemic (3), reveals that at the end of 2009, there was an estimated 32.8 million people living with HIV/AIDS worldwide (range 30.9 million to 34.9 million), 2.6 million new infections (range 2.3 million to 2.8 million), and 1.8 million deaths (range 1.6 million to 2.1 million) related to the disease. For children, the figure was estimated to be 2.5 million (range 1.7 million to 3.4 million). The total number of HIV infected children born was estimated to be 370,000 (range 230,000 to 510, 000) citing a 24% decrease from 5 years ago. These changes have most likely been a result of improved accessibility to antiretroviral therapy, especially in countries of higher prevalence, improved care and support and a decreasing incidence of the disease in affected populations.

The UNAIDS report also documents that in the Caribbean region, with a population of an estimated 41 million, there was a reported adult prevalence of HIV estimated at 1.0% (range 0.9-1.1%), with the number of people living with HIV in the region reported to be 240,000 (range 220,000 to 270,000). This accounted for 0.8 % of new infections worldwide with 17,000 newly infected cases (range 13,000 to 21,000) and an overall 12,000 reported AIDS-related deaths in children and adults. The prevalence of HIV in the Caribbean has varied little since the 1990s. The number of children living with HIV was reported to be 11,000 and the number of newly infected children was 2300 for the year.

In Barbados, the overall adult prevalence of HIV was reported as being an estimated 1.4 % for the year 2010 15-49 year age group with a mean prevalence estimated to be 0.93%.

The Caribbean Epidemiology Centre (CAREC) indicates that paediatric cases account for 6% of total HIV/AIDS cases in the region and the seroprevalence of HIV in pregnant women has been documented to range between less than 1% up to 12% depending on the country. This compares with a reported prevalence from the Sub Saharan African region of 6.4% in females, far exceeding that of males in that region, with far lesser prevalence rates in East Central African and West African countries.

The major route of transmission of HIV is through mother-to-child transmission. As a consequence, the prevalence of HIV cases in the paediatric population is directly related to the prevalence of the virus in the antenatal population and the impact of measures taken to reduce the transmission of the virus from mother to child (5). Health Services research has shown that during 2003, only 8% of the world's females had been offered antenatal services. In 2004, 10% were receiving anti-retroviral treatment for prevention of mother-to-child transmission (PMTCT) of HIV and the end of 2008, the coverage reached 45%. By comparison, in the Caribbean region a corresponding 34% PMTCT services were received by the at-risk population in need. UNAIDS reports also indicate that in 2008, 52% of pregnant women were treated with highly active anti-retroviral therapy (HAART) for PMTCT, within the Caribbean region.

In the absence of prevention of mother-to-child interventions and prophylactic anti-retroviral medication, the transmission of HIV from mother to child has been estimated to be 30-35%. The implementation of the intervention with zidovudine monotherapy and later HAART for PMTCT of HIV has been the most effective among interventions to date. This has resulted in an ability to achieve a markedly reduced 1-2% transmission rate from mother to child, as reported from an increasing number of countries and also a dramatic reduction in the number of new cases of paediatric HIV.

The prevalence of HIV in pregnant women can have a direct effect on transmission of HIV from mother-to-infant. Prevalence varies from country to country and can have regional variation even within a country. The prevalence is still relatively low in the USA at 0.15% (0.10 – 0.97%). Within the Caribbean, there is still a wide variation in prevalence with the lowest rates being reported from Cuba and highest from Haiti and the Bahamas (3%). By contrast, the reported prevalence of HIV in antenatal women reported at the end of 2008 was 42% in Swaziland and 29% in South Africa.

In Barbados, new HIV case diagnosis among pregnant women decreased by half between 1999 and 2003 with prevalence decreasing considerably during the past two decades of surveillance. The expansion of voluntary counselling and testing services increased significantly from a level of 25% in 1992 to 97% in 1999 (Kumar *et al*). The seroprevalence of HIV in pregnant women in the 2008 Barbados surveillance report was 0.96%. Despite some fluctuation, this trend has remained relatively constant during the last decade.

In the absence of treatment, mother-to-child transmission remains the predominant route of transmission of the HIV being responsible for approximately 90% of cases, depending on the country reporting. More than 90% of paediatric HIV infection occurs as a result of this perinatal transmission, whether taking place in utero, intra-partum or post-partum. Breast-feeding has also been demonstrated to be responsible for 10-16% of transmission *via* post partum spread. In the absence of prevention measures, the rate of mother to child transmission (MTCT) has been reported to be approximately 35% (ranging 15% to 40%). Commencing in the mid 1990s, the intervention prophylactic antiretroviral therapy (ART) on PMTCT of HIV heralded a major advance in combating the transmission of HIV from mother-to-child. The adoption of specific interventions for preventive mother-to-child transmission programmes and implementation of measures such as the strengthening of voluntary testing and counselling programmes, prescribing of antiretroviral drugs (ART), and avoidance of breast feeding were shown to further reduce the MTCT rates.

Following the devastating impact of the paediatric HIV/AIDS epidemic on mortality in the paediatric population in the Caribbean, PMTCT programs were implemented at varying times in different territories. The tremendous benefits and early successes were demonstrated in the early development of PMTCT programmes implemented in Bahamas by Gomez *et al*, Bermuda and Barbados.

The PMTCT programme initiative in Barbados commenced in 1995, one year after the original report of successful treatment with zidovudine in PMTCT of HIV had been published in the *New England Journal of Medicine*. Since that time, short course nevirapine (SD-NVP) and subsequently HAART protocols, have been adopted in keeping with the Caribbean HIV/ AIDS Research and Training (CHART) and locally developed guidelines.

The objective of the present study was to determine the outcome of MTCT following the implementation of PMTCT prophylaxis with anti-retroviral drug therapy during a study period in Barbados.

Design and Methods

The study was a prospective descriptive one, which was conducted between January 1st 2002 and Dec 31st 2010. All pregnant women on the island are usually seen for follow-up from the time of booking of their pregnancy, with the majority having being seen at and referred to the antenatal clinic at the QEH from the Government operated Polyclinics. Once identified, HIV infected women were subsequently referred to the Queen Elizabeth Hospital's antenatal clinic for continuing care, and simultaneously to the dedicated HIV follow-up clinic at the Ladymeade Reference Unit for close monitoring and follow-up in relation to HIV specialist care. At each subsequent antenatal visit, the pregnant woman was seen by the specific nurse midwife counsellor, who performed ongoing counselling and also a midwife and or obstetrician and gynaecologist.

Patients were counselled about the benefits of not breastfeeding, and prescribed HAART according to protocol, or prescribed ART consisting of SD-NVP depending on their time of presentation for care, using the current national PMTCT treatment guidelines. Anti-retroviral drugs were supplied free of charge through the Ladymeade Reference Unit or the pharmacy at the QEH. Ninety-nine percent of deliveries occurred at the Queen Elizabeth Hospital, with 3% of deliveries taking place at the private hospital. Elective Caesarian sections were not performed routinely for HIV infected pregnant women.

According to guidelines in place, within 24 hours of birth infants born to HIV infected women were seen by a medical officer of the paediatric department assigned to the post natal ward. Depending on the treatment prescribed for the woman during pregnancy, infants were prescribed a one week course of oral zidovudine or single dose nevirapine plus one month of zidovudine according to protocol. Mothers and respective infants were followed-up after discharge with ongoing counselling at clinic visits. Defaulting patients were tracked by a specific public health nurse-midwife to ensure follow-up. At 2 successive follow-up visits after birth (3 months and 4½ months

of age), infants received clinical examinations. At each visit, monitoring was performed for HIV transmission with 2 successive RNA- PCR (Roche) blood tests to ascertain viral loads of < 50 copies/ml. Subsequent clinical evaluations were done: at 1 year and up to 18 months of age depending on the HIV Enzyme linked adsorbent assay (ELISA) antibody result and protocol of treatment.

Data was gathered on the number of pregnant women who were infected, treatment and follow-up, and the same was done for their respective offspring. The transmission rate for infants born to HIV infected pregnant women who received anti-retroviral treatment was calculated.

According to clinical indications and immunosuppression category according to CHART guidelines, infected infants were referred for commencement on a 3 drug HAART regimen. Those infected were either followed-up for clinical progress by a specific paediatric consultant and team in the paediatric Out Patient Department of the QEH, or by a paediatrician for private care. The Fisher Exact Test was used for statistical analysis.

Results

During the 9 year period of study there were 22,859 live births. Two hundred and twenty-four HIV infected pregnant women of African descent delivered live births (Table 1).

Table 1: Deliveries by HIV infected Pregnant Women in 2002-2010, at the QEH.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
Deliveries	14	25	25	34	21	21	31	27	26

Among the women who delivered, there were 6 (2.6%) who had neither accessed antenatal care nor received HAART or any medication for prevention of mother-to-child transmission of HIV. All of them were classified as being unbooked and had presented to the hospital in active labour.

There were 3 infected infants born to infected pregnant women, resulting in a MTCT of 1.3%. One of the mothers who delivered an infant in 2006,

admitted to having breastfed her infant, despite counselling during the antenatal period and at birth. She had also admitted to poor compliance in relation to taking her prescribed HAART therapy for PMTCT. Up to the time of the last follow-up visit, all surviving infants who had been brought for scheduled follow-up visits, were currently living with either one or both parents or a custodian relative in the case where the child was an AIDS orphan. There were no deaths among either the infected or non-infected children during the period of study.

Detailed analysis of follow-up visits revealed that one of the HIV exposed infants and mother had migrated back to the mother's homeland before the two PCR tests were done. To date, three of the mothers have still refused to bring their infants for PCR testing, despite efforts to persuade them that the visit to the paediatric clinic was necessary. During the period of study, there were 9 deaths among infected mothers (7.5%). In all cases, the cause of death was related to complications of their HIV disease.

Discussion

In the Caribbean region, the predominant route for transmission of the HIV is mother-to-child. Achieving a reduction in the prevalence and spread of HIV among pregnant women has been identified as being one of the main strategies and aims of PMTCT programmes worldwide.

Following the discovery of the effects of PMTCT using ART during pregnancy, there have been a number of reports on the effectiveness of PMTCT programmes throughout the Caribbean. Gomez has reported that the programme in the Bahamas has seen a significant reduction in the rate of HIV transmission from HIV-infected mothers to their newborn children, from 28% in 1995 to 3% in 2002. Christie *et al* have also published research findings citing their experience with Paediatric HIV and PMTCT with a special edition of the *West Indian Medical Journal* being devoted to this research, which cites the experience in Jamaica.

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The annual number of cases of live born infants delivered by HIV infected pregnant women in Barbados has shown varying trends during the last decade with a significant decline since the initiation of a PMTCT

intervention treatment in 1995. The number of live births delivered by HIV infected women has tended to show some variation from year to year since the PMTCT interventions were introduced (Table 1). Comparisons made looking at results achieved after the interventions with PMTCT prophylaxis for three types of regimen utilised during the past decade reveals that by far, the HAART intervention was the most successful in reducing PMTCT of HIV.

Comparative data analysis using the Fisher Exact Test for the data from the 1996-2000 study where mother–infant pairs were treated with zidovudine monotherapy [94 infants with a 5.5 % transmission rate] (Table 2) and the present study [224 infants with a 1.3% transmission rate], resulted in a p-value=0.0520 and showed a significant difference in the rate of transmission in the two groups.

Table 2 Mother to Child Transmission of HIV by Type of Prophylaxis, 1996-2010 for QEH.

HIV Prophylaxis	No. of Live births	No. of Children infected	% Transmission
Long course ZDV (1996-2000)	94	5	5.5
Short course NVP (2000-2001)	37	3	8.5
HAART +SD-NVP (2002-2010)	224	3	1.3

In general, the PMTCT studies which have been conducted in Barbados, produced outcomes that have been very positive with the transmission rates being reduced significantly. The results of the present period of study reveal that to date, treatment with the HAART regimen has been an extremely effective intervention in further reducing the rate of transmission of HIV from mother-to-infant in Barbados.

This success story has also been linked directly to the efforts at intensive monitoring, the readily available free HAART treatment and adherence among patients.

The value of adherence to a firm PMTCT policy and its implementation has also been demonstrated. If the aim of total elimination of mother-to-child transmission of the HIV is to be achieved by Barbados, there is a need for closer follow-up of infected women and their HIV exposed infants, with the aim of reducing the 2.6% defaulting figure towards a zero level. A recommendation can be made for both of these measures to be used to the fullest to achieve a further reduction of MTCT of HIV, with the ultimate

goal being the total elimination of transmission via the mother-to-child transmission route.

The scenarios of some parents not being compliant with follow-up visits for their infants, continues to present a challenge for health care providers who deal with them. It has become a highly ethical issue of ensuring that the rights of the HIV exposed infant of having access to health care are respected. In some countries, legislation has been enforced to protect such rights.

It is hoped that the results of this study can act as a catalyst to reinforce efforts to ensure total screening for HIV in pregnant women both locally and within the Caribbean region, where the prevalence of HIV is high. It is essential to have health policies in effect for the supply of ZDV or other alternative cost effective antiretroviral regimens to combat MTCT for consenting HIV infected pregnant women and their infants.

References

- Camara, B., Lee, R., Gatwood, J., Wagner, H., Cazal- Gamelsy, R., & Boisson, E. (2003). 'The Caribbean HIV/AIDS epidemic epidemiological status: Success stories—a summary.' CAREC Surveillance Report (CSR) , 23 (Suppl. 1), 1–16.
- Christie CDC, Steel-Duncan J, Palmer P, Pierre R, Harvey K M, Samuels L, Dunkley-Thompson J, Johnson N, Singh-Minott I, Anderson-Allen M, Billings C, Evans-Gilbert T, Rodriquez B, Moore J, McDonald-Kerr C, Taylor F, Smikle M, E. Williams, Whorms S, Davis D, A. Mullings, Morgan O, Macdonald D, Alexander G, Onyonyur A, Hylton-Kong T, Weller P, Harris M, A. Woodham, Haughton D, Carrington D, Figueroa J.P. 2008. 'Paediatric and Perinatal HIV/AIDS in Jamaica. An International Leadership Initiative, 2002–2007.' *West Indian Medical Journal* 57(3): 204.
- Connor EM, Sperling RS, Gelbert R, Kislev P, Scott G, O'Sullivan MJ . (1994). 'Reduction of maternal-infant transmission of human immunodeficiency virus type 1 with zidovudine treatment.' *New England. Journal of Medicine*. 1994; 331:1173-1180.
- Dunn NT, Newell ML, Ades A, Peckham C. 'Risk of human immunodeficiency virus type 1 transmission through breast feeding.' *Lancet* 1992; 340:585-8.

- Gomez MP, Bain R.M, Dean S, McNeil P, Read S.E. 'Zidovudine reduces vertical transmission of HIV in the Bahamas.' A Conference on Global Strategies for the Prevention of HIV Transmission from Mothers to Infants, Washington, D.C, September 1997.
- Gomez P. 'Scaling up- Lessons Learnt.' Presented during the Technical Advisory Committee on HIV/AIDS. Boca Chica Dominican Republic, January 2005. Available at [www.paho.org/english/ad/fch/ai/Bahamas-Scaling %20Up- Lessons%20Learnt.pdf](http://www.paho.org/english/ad/fch/ai/Bahamas-Scaling%20Up- Lessons%20Learnt.pdf)
- 'HIV/AIDS in the Caribbean: Regional Overview.' Available at: <http://hivinsite.ucsf.edu/global?page=cr02-00-00>
- Kumar A, St John MA, Robinson H, Forde S. (2003) 'Voluntary Counselling and Testing for HIV among pregnant women, in a developing country from the Caribbean - An analysis of success and implementation barriers.' *West Indian Medical Journal*. 52:69.
- McIntyre J. (2005) 'Preventing MTCT of HIV: successes and challenges.' *British Journal Of Gynaecology* 112: 1196-203.
- Ministry of Health Barbados 'HIV-AIDS Surveillance Report' , 2010.
- St John, MA, Kumar A, Cave CT. (2003) 'Reduction in perinatal transmission and mortality from human immunodeficiency virus after intervention with zidovudine in Barbados.' *Paediatric Infectious Disease Journal* 22: 422-5.
- St John M.A, Kumar A, Carmichael C, Cave C, Abayomi A. (2003) 'Efficacy of Nevirapine Administration on the Mother to Child Transmission of HIV using a modified HIVNET 012 regimen.' *West Indian Medical Journal* 52:19 (suppl. 3).
- St John M.A. (2006) 'Impact of a national prevention of mother-to-child transmission programme in Barbados: The first decade.' *West Indian Medical Journal* (Suppl 2): 54
- St John M.A (2008) 'Review of the Current Status of the Paediatric HIV/AIDS Epidemic Barbados: Surveillance and Follow-up of cases post availability of ART.' *West Indian. Medical Journal*. (Suppl 2): 41
- St John M.A, Mascoll K, Waterman. I. (2008) 'Further Decrease in Mother To Child Transmission of HIV following Anti-retroviral Prophylaxis in pregnant women in Barbados: a 5 year study.' *West Indian Medical Journal*. (Suppl 2): 42
- UNAIDS Report on the global Aids Epidemic 2010.
www.unaids.org/documents/20101123_GlobalReport_Chap2_em.pdf.

Intersections between HIV/AIDS and Violence Against Women: Research to Develop Pilot Projects in Barbados and Dominica

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Abstract

More than half of people living with HIV in the Caribbean are women. Is the high prevalence of violence against women (VAW) an explanatory factor? This article explores Caribbean quantitative and qualitative evidence of associations, and the extent to which services to address HIV and VAW are integrated in Barbados and Dominica. Qualitative studies present the strongest evidence of links, while quantitative studies are methodologically limited. Service providers generally focused either on VAW or HIV. There is a need to address HIV at the level of gender norms and to develop mechanisms to integrate VAW and HIV services.

Key words: HIV, violence against women, gender.

Introduction

In most countries of the Caribbean, the proportion of HIV cases accounted for by women has risen over time. This proportion is now estimated to stand at 53% for the region as a whole (UNAIDS Caribbean Regional Support Team 2011), as compared with 60% for Africa and no more than 35% for any other region of the world (UNAIDS 2008). The vulnerability of girls and women appears to be age-related, with females outnumbering males among 15-24 year olds in most Caribbean countries (Allen, McLean *et al* 2004). The Caribbean also has the dubious distinction of being second only to Africa in terms of HIV prevalence in the general population aged 18-49, with approximately 1% infected in this region (UNAIDS 2010).

While violence against women (VAW) is also thought to be common in the Caribbean, the data to support this is lacking, the issue having received little attention from public health specialists as compared with HIV. With the exception of a study in Barbados, of which the results have not yet been published (Bureau of Gender Affairs 2010) most studies have been conducted by non-governmental organisations (NGOs) on small budgets. Methodologies for assessing prevalence vary between countries and institutions conducting research. According to estimates in several Caribbean countries, around 30% of women in intimate relationships have experienced violence from their partners (Clarke and Sealy-Burke 2005).

Scholars have posited ways that VAW and HIV may be linked:

1. Violence may increase risk of HIV transmission through forced or coercive sexual intercourse with an infected partner
2. Sexual abuse during childhood may be associated with high sexual risk-taking behaviour during adulthood
3. Violence may interfere with a woman's ability to negotiate safer sex
4. Women who are HIV positive may be at a higher risk of violence, particularly following disclosure of HIV serostatus to partners
5. Violence against people living with HIV (PLHIV) can increase the likelihood that they will engage in risky behaviour and thus exacerbate the HIV epidemic (Development Connections UNIFEM *et al* 2008)

A question that arises is whether HIV and VAW are associated in the Caribbean. This paper presents research conducted by the Organisation of American States Inter-American Commission of Women (OAS/ CIM) which aimed to identify:

- 1) possible intersections between HIV and VAW in the Caribbean, and
- 2) services provided to address HIV and VAW in Barbados and Dominica, with a view to developing services to address the intersections.

Methodology

The research aims have been addressed using two methods: literature review and interviews with key stakeholders.

The literature review sought to identify empirical research on intersections between HIV and VAW in the Caribbean, and to draw out implications of the research findings for the development of appropriate services in Caribbean settings. Included were publications in peer-reviewed journals or books and documents which have not been published using these channels.

Published research was sought using online electronic databases such as Pubmed and Popline. A key source was the Database of Caribbean HIV/AIDS Research (Caribbean Health Research Council 2008), which was searched using keywords such as ‘violence’, ‘gender’ and ‘abuse’. The search for other reports was conducted by contacting key agencies involved in HIV or gender-based violence services. Within Barbados and Dominica, reports and policy documents were sought from stakeholders contacted to be part of the research.

Primary data collection was conducted using semi-structured interviews in January-February 2009, to identify HIV and VAW services and provider views on the value of integrating these services. Interviews were conducted with people involved in advising or advocating on, conceptualising, planning,

directing and managing HIV and AIDS and VAW service provision, such as:

- Civil servants in Ministries of Health, Ministries with responsibility for gender, Ministries of Youth, the Police Force and national HIV programmes
- NGOs (including organisations of people living with HIV, women's shelters and women's groups)
- UN agencies
- Managers of key facilities providing services to address VAW or HIV.

Thus the emphasis was on including key stakeholders with a professional and personal interest in HIV and AIDS and/or VAW. The sampling aimed to reach 'saturation', whereby all the important stakeholders mentioned by other stakeholders could be covered. This was very largely achieved, but was limited by the amount of time available for the fieldwork (five days in Dominica and eight in Barbados). The interview guide is provided at Appendix 1.

Written informed consent was obtained from all interviewees. Most interviews were recorded using a digital voice recorder. Interviewees were informed that the CIM/OAS would be provided with their contact details and would also follow up regarding the development of a pilot intervention in the country.

Literature Review: Evidence of associations between HIV and VAW in the Caribbean

In the Caribbean, a number of studies have shown links between VAW or child abuse and sexually transmitted infections (STI) or high risk sexual practices such as non-use of condoms and early sexual initiation. Quantitative studies are described in section 1.1 and qualitative studies in sections 1.2 to 1.5.

1.1 Quantitative studies of VAW as a risk factor

Analyses of data from Demographic Health Surveys in the Dominican

Republic and Haiti showed that VAW is associated with STI. In the Dominican Republic, the percentage of women who had an STI twelve months prior to the Survey was 3.7% among those who had suffered violence compared to 1% among those who had not suffered violence. The equivalent percentages for prevalence in Haiti were 18.2% among those who experienced violence and 10.3% among those who did not (Kishor and Johnson 2006). In another study in Haiti conducted among women accessing a women's health clinic, STD-related symptoms were found to be associated with forced sex after controlling for other factors (Smith Fawzi, Lamberta *et al* 2005).

A study among pregnant women in Trinidad showed that risk factors significantly associated with positive HIV status included early age of first sexual intercourse, along with a history of sexually transmitted disease, mental health problems and homelessness (Hutchinson and Jameson 2006). While this did not address VAW directly, early sexual intercourse may indicate child sexual abuse.

Within the Caribbean, only one study was found which examined associations between VAW and condom use, and this included child sexual abuse as a variable rather than violence against women. The study tested the following predictors of condom use in a Jamaican sample of 1591 females and 962 males: age, childhood sexual abuse, alcohol use, drug use, STI status, and number of partners. For women, the best predictors of lower condom use were childhood sexual abuse, older age and having sex while using cocaine. Child sex abuse did not predict condom use among men (Locke, Wyatt *et al* 2004).

The Caribbean Youth Health Survey was carried out with 15,695 in-school youth age 10-18 in nine Caribbean countries. In their analysis of data from that survey, Blum and Ireland (2004) showed that the likelihood of having had sexual intercourse was significantly increased if young people had been abused or expressed rage in agreeing with the statement, 'Do you ever think about hurting/ killing someone?' On the other hand, a sense of family connectedness and school connectedness reduced the likelihood of sexual intercourse. This applied to both girls and boys. For instance, abuse (either physical or sexual) was found to be a significant predictor of sexual activity, raising the odds of having had intercourse by 36% among boys and 114% among girls. Table 1 shows that the associations between risk and protective

factors and sexual activity were stronger for females than males. Young females seemed especially responsive to abuse and feelings of rage and differences in their social environments with regard to sexual activity.

Table 1 Caribbean Youth Health Survey: odds ratios for sexual activity by risk and protective factors

	Odds Ratio (p-value)	
	Female	Male
Risk-associated variables		
Rage ¹	2.93 (<.001)	2.77 (<.001)
Abuse ²	2.14 (<.001)	1.36 (<.001)
Protection-associated variables		
Family connectedness ³	0.41 (<.001)	0.70 (.008)
School connectedness ⁴	0.04 (<.001)	0.26 (<.001)

Source: (Blum and Ireland 2004)

Notes: The paper does not show how the variables were dichotomised for risk factor analysis

1. 'Do you ever think about hurting/ killing someone?' Possible answers 'Never', 'Some of the time' or 'Always'.
2. Ever been sexually or physically abused
3. Based on five items: 'family pays attention to you', 'family understands you' 'can tell mom/ dad your problems', 'mom/ dad cares about you' and 'other family members care'. Responses were along a three point scale: from 'very little', 'some' to 'a lot'
4. Based on two questions: 'Do you get along with teachers', 'Do you like school?'

With the exception of the study of pregnant women in Trinidad, there is a distinct lack of research in the Caribbean directly measuring the association between HIV and VAW (and in the study in Trinidad the measure was early intercourse which is not a clear indicator of VAW). Some have looked at child sexual abuse which, as argued later in section 1.3, may be related to VAW but is not equivalent to it. The studies described above give some evidence of what might be called 'proxy links' between indicators of sexual health status or sexual risk-taking and various indicators of violence.

A further limitation is that all the Caribbean studies are cross-sectional, with data on STI or condom use collected at the same time as the data on factors that may be associated with them. This means that the direction of causation is not known. Longitudinal studies are needed, whereby associations can be explored between behavioural factors and new cases of STI or changes in condom use. To date, the only studies that have been conducted that show that VAW is associated with new cases of HIV have been conducted in South Africa (Jewkes, Dunkle *et al* 2010).

1.2 Qualitative research on gender norms and sexual-economic exchange

VAW has been shown to be grounded in gender norms that have been found in many other parts of the world, valorising 'hard' masculinities and violence rather than communication for men in situations of conflict. There is also the notion, as elsewhere, of male control over the female body, making jealousy a justifiable motive for violence (Chevannes 2001; Plummer and Simpson 2007). In addition, VAW in the Caribbean has been shown often to be motivated by norms of sexual-economic exchange (Kempadoo 2004), with the strong cultural norm that men should provide financially for their partners. Inability or unwillingness to do so promotes tension and sometimes violence in sexual relationships. Sexual-economic exchange has also been shown to be a strong feature of sexual behaviour in the Caribbean (Le Franc, Wyatt *et al* 1996; Bailey, Le Franc *et al* 1998; Allen, McLetchie *et al* 2000; Barrow 2006; Bombereau and Allen 2008).

Several Caribbean studies have shown that some women take risks in choice of partner for access to resources. They may accept partners who are involved in criminal behaviour and have a history of violence because these partners offer them access to material goods and status. Barrow shows that young women and girls involved in 'bashment' culture in Barbados gain respect from their peers if they are able to have relationships with men who are seen as dangerous or notorious. Part of the notoriety of these men is derived from a reputed history of multiple partnerships, and this is also a risk factor for HIV (Barrow 2006; Barrow 2007).

Focus groups with young people and interviews with key informants in Tobago found that young women and girls (and occasionally young men and boys) sometimes have sex for access to status goods, including clothes,

cosmetics, jewellery and fast food. For some, sex was offered in exchange for basic needs including food, bus fares and stationery for school. In the quantitative survey among 10-29 year olds that accompanied this study, female participants reported that their partners at their first sexual encounter were on average four years older than they were, as compared with one year older for male respondents. Focus group participants and key informants reported a 'culture of silence', with poor communication between partners and between parents and children concerning sex, emotional relationships and condom use, and deliberate silencing of discussion of incestuous relationships which were thought to be common (Allen, McLetchie *et al* 2000; Allen, Martinez *et al* 2002).

These and other qualitative studies with young people (Kempadoo and Dunn 2001; Barrow 2006; Hutchinson, Jemmott *et al* 2007) show that young women and girls are especially vulnerable because frequently their partners are older and/or involved in behaviour that increases HIV risk, including VAW. Gender-based norms of sexual-economic exchange provide the impulse for women to have sex with economically powerful men.

These findings are not restricted to youth. In Jamaica, a study showed that multiple partnerships among working-class women were a means to cover economic needs and provide additional support for children, and note that this is historically grounded in the Caribbean (Le Franc, Wyatt *et al* 1996). The pattern is generally of serial or consecutive partnerships by women while many men have simultaneous partnerships, sometimes obligating them to support several households. It was found that VAW was often provoked by jealousy and 'disrespect' – including when the woman asks the man to use a condom. While some women were deterred from negotiating condom use, some did not accept physical abuse as a part of a relationship, and this is a reason they sought economic independence. However, this quest for independence did not always have the intended impact. There was pressure from some men for independent women to contribute a greater portion of the household expenses. When women brought money into the household their partners reallocated the money they earned to support other women. Such situations led some women to abandon their economic independence. This study provides rich data on the complex relationships between violence, sexual risk and gender-based economic responsibilities.

1.3 Violence in intimate relationships and the family unit

Research highlights the often antagonistic nature of intimate relationships in the Caribbean and violence within relationships throughout the lifecourse. A survey of interpersonal violence (IPV) among 15-30 year olds was conducted in Barbados, Jamaica and Trinidad and Tobago (3,401 respondents) (Le Franc, Samms-Vaughan *et al* 2008). Approximately three-quarters of all respondents (ranging from 63.1 to 72.5% for men, and from 65.1 to 83.1% for women) reported being a victim of some form of violence, with the violent act most commonly perpetrated by a partner within a relationship (59.0% on males and 66.7% on females). The authors note that:

It may be helpful to recognise the existence of a universal culture of adversarial relationships, in a global environment permissive of the expression of violent solutions (Le Franc, Samms-Vaughan *et al* 2008).

Conflict relationships are often apparent in childhood, with children witnessing violence between their parents or carers, and being subjected to physical and sexual abuse, including incest (Kempadoo and Dunn 2001). A rare clinical study that demonstrated incest was carried out among girls under 12 years old who presented to the UWI hospital in Jamaica with vaginal discharge. Where information on sexual contact was available, the perpetrator was found to be a relative (father, brother, uncle, cousin), step-father or mother's consort, or a family friend or neighbour (Ramlal, Champagnie *et al* 1985). There is also cultural acceptance of physical discipline of children (Bailey, Le Franc *et al* 1998). As a result of the different types of abuse they experienced in childhood, first intercourse may be forced, or young people may be vulnerable to sexual exploitation or to initiating intercourse before they are emotionally mature (Gage 2005). As noted above, the Caribbean Youth Health Survey showed that the likelihood of early sexual activity was greater among young people who had experienced abuse – a finding replicated by another survey in Anguilla (Kurtz, Douglas *et al* 2005).

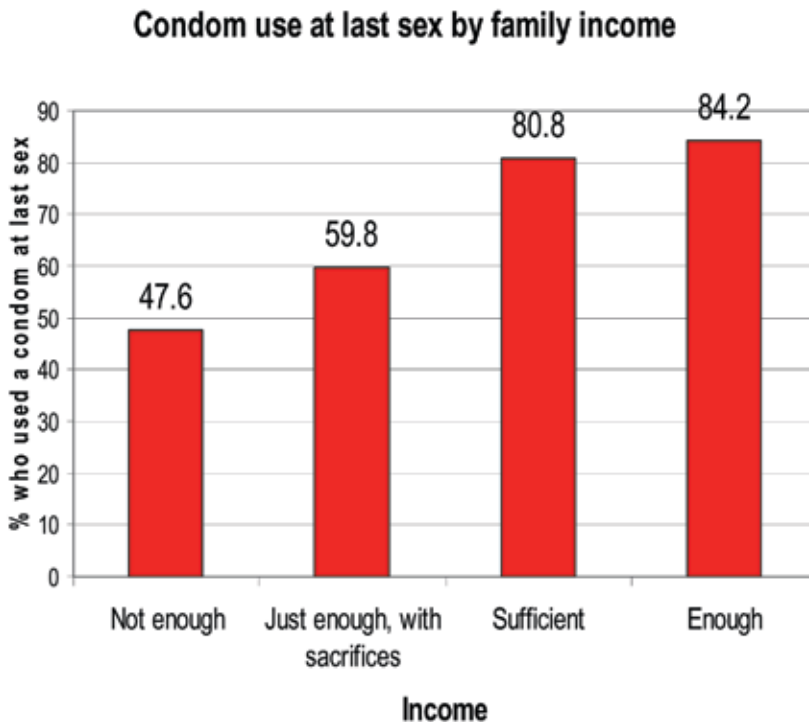
Condom use is discouraged by the antagonistic nature of intimate relationships. A survey implemented in Kenya, Tanzania and Trinidad showed that factors positively associated with consistent condom use included (among other things) perceived ease in requesting condom use and making requests for

condom use (Norman 2003). Poor communication between sexual partners and fear of violence are likely to be important explanations for low and inconsistent levels of condom use in the Caribbean (Bombereau and Allen 2008).

1.4 HIV stigma and discrimination and violence against PLHIV

There are a few studies of stigma and discrimination (S&D) faced by people living with HIV (PLHIV), but none of these have had a major focus on violence (Adomakoh, Lewis *et al* 2003; Miric 2004; Abell, Rutledge *et al* 2007). A three-country Caribbean study of quality of life among PLHIV showed that in the past year 12% of women living with HIV had been physically abused by someone they knew and 23% had been rejected by a family member. However there were no significant differences in these indicators between male and female survey participants (Allen 2007). The violence indicators were not associated with sexual risk behaviour. Rather, multivariate logistic regression found that economic security was one of only three factors independently associated with condom use at last sex. This upholds the idea that poverty can function as a form of ‘structural violence’, exacerbating the HIV epidemic (Farmer 1999). It was found that female participants reported lower levels of economic security than males (Allen, Simon *et al* 2010). The results are consistent with Caribbean research indicating links between economic dependency of women on their sexual partners and their sexual risk behaviour (see above). Fig. 1 illustrates the relationship found between economic security and condom use.

Fig. 1



Source: Allen, Simon *et al*, 2010

1.5 Sex workers

Sex workers in the Caribbean have been shown to be at very high risk of HIV, with surveys showing seroprevalence between 9 and 31% (Pan Caribbean Partnership Against HIV/ AIDS 2008). Though risk factor surveys have been conducted with sex workers (Douglas, Braithwaite *et al* 1997; Persaud, Klaskala *et al* 1999; Allen, Edwards *et al* 2006), these have not explored indicators of VAW as an explanatory factor. Qualitative studies have suggested that violence by clients and regular partners is often experienced (Mayorga and Velasquez 1999; Ragsdale and Anders 1999; Red Thread Women's Development Programme 1999). Accounts and severity of police brutality against sex workers vary by country (Cabezas 1999). Mobility and

migration of Caribbean sex workers is common (Borland, Faas et al 2004). Accounts of trafficking, in the sense of being forced into sex work through deception and physical abduction, are reported by sexual and reproductive health services providers and law enforcement officials but published data are lacking. Kamala Kempadoo argues that most Caribbean sex workers in the region enter the trade voluntarily, so attention should be paid to other forms of violence, restrictions on movement and poor working conditions (Kempadoo 2004).

Policy and programmatic responses to HIV and VAW in the Caribbean

2.1 Responses at Caribbean regional level

Programmatic responses to HIV at the Caribbean regional level took a quantum leap around the turn of the 21st century with the formation of the Pan Caribbean Partnership Against HIV and AIDS (PANCAP). Based at the CARICOM Secretariat but now expanding to encompass Caribbean countries beyond CARICOM, PANCAP amalgamates State, NGO, public health, academic, development and aid agency actors. In the latest version of PANCAP's Caribbean Regional Strategic Framework (2008-12), there is an emphasis on addressing the gender-based norms driving the epidemic. Few concrete projects have yet been put in place to address this strategic objective. A new Caribbean Coalition of Women and Girls has been launched, with emphasis on the empowerment of Caribbean women and girls living with HIV.

With regard to VAW initiatives at the regional level, the Declaration of San Salvador on Gender, Violence and HIV was agreed by consensus by CARICOM along with other governments of the Americas. The Inter-American Convention on the Prevention, Punishment and Eradication of Violence Against Women (also known as the Convention of Belem do Para) has been signed by Caribbean governments. Major strides have been made in the adoption of CARICOM model legislation to address violence against women in several Caribbean countries (Clarke and Sealy-Burke 2005). PANCAP also is seeking to address issues of violence through its campaigns against HIV stigma and discrimination and its programme on Law, Ethics and Human Rights.

2.2 Interviews with stakeholders in Barbados and Dominica

Questionnaires were completed containing demographic information for 27 respondents; 13 in Barbados (representing 9 agencies), 10 in Dominica (representing 9 agencies), and 4 in UN agencies based in Barbados (representing 3 agencies). Of the 27, 85% were female. In Barbados, an additional three females were interviewed informally. In Dominica, an additional two males were interviewed without the use of a questionnaire. This section presents findings regarding the situation during the fieldwork period in 2009.

Interviews with stakeholders in Barbados and Dominica revealed some integration of approaches to HIV and VAW already, and at least a high level of awareness of possible connections between the two. Most agencies concentrated predominantly either on HIV or VAW, with the exception of the UN agencies where efforts were underway to promote the integration of both. For example, UNIFEM's¹ representative reported a 5-country programme on Gender and Human Rights. They were working with education and health sector workers. In health, connections between VAW and HIV were addressed in training health care workers.

Dominica

The National HIV/ AIDS Response Programme (NHRP) in Dominica is located in the Ministry of Health and the Environment. Responsibility for addressing VAW lay principally with the Women's Bureau of the Ministry of Community Development, Gender Affairs and Information, while cases of child abuse were addressed by the Welfare Department of the same Ministry. These entities were reported to have developed a close working relationship. For instance, outreach events including World AIDS Day and 16 Days of Action Against VAW were facilitated by staff from both the NHRP and Women's Bureau. If cases of VAW or child abuse were discovered during counselling and testing for HIV conducted by the NHRP, these cases were referred for further support to the Welfare Department. Trained counsellors were available at the NHRP and Welfare Department but not the Women's

¹ UNIFEM was renamed UN Women after the completion of data collection.

Bureau, and the Welfare Department tended to concentrate its limited human resources on child abuse cases.

Support for women experiencing violence was often provided by NGOs, especially the Dominica National Council of Women (DNCW). This agency employed a full-time counsellor but had no residential facilities providing shelter to women experiencing violence. Life Goes On and Dominica Network Inc were NGOs supporting and representing PLHIV. Life Goes On shared offices with the NHRP and the latter provided support to its activities. Referrals between agencies were frequent but concern was expressed that some women who have experienced violence were distressed by encountering several agencies, 'having to tell the story again' and were concerned about confidentiality.

Barbados

In Barbados, the national coordinating body for HIV activities, the National HIV/AIDS Commission was located in the Ministry of Family, Youth and Sports, as was the Gender Bureau, the governmental entity responsible for addressing VAW. Direct care and support for PLHIV and HIV counselling were the responsibility of the National AIDS Programme at the Ministry of Health. The Victim Support Unit of the Royal Barbados Police Force coordinated a network of volunteer counsellors throughout the country who could respond to cases of VAW. In rape cases, a police doctor referred to the National AIDS Programme for counselling and testing and Post-Exposure Prophylaxis to prevent HIV transmission. The Child Care Board addressed child abuse cases.

Several NGOs worked closely with the government entities responsible for either HIV or VAW. The Business and Professional Women's Club (BPWC) ran a hotline and a safe house for up to 22 survivors of VAW. The National Organisation of Women organised educational events with violence prevention themes. Comfort, Assist, Reach Out, Educate (CARE) provided support for PLHIV, and, along with United Gays and Lesbians Against AIDS, Barbados, advocated against discrimination on the basis of HIV and sexual orientation. The Caribbean HIV&AIDS Alliance provided HIV education and support *via* trained people from marginalised communities.

Discussion

Our findings suggest that there may be a need to address possible connections between HIV and VAW at several different levels. At the broadest level, the literature review suggests fundamental social and economic structural factors may connect HIV and VAW in the Caribbean. These include gender norms and inequality that lead to the expectation that males should have control over the bodies of females. They also lead to sexual-economic transactions, with VAW often arising when the implicit bargain of these transactions is believed by one or other party to have been broken (Bombereau and Allen 2008). The literature review also revealed poor communication and antagonism in family settings, leading to early intercourse, inconsistent condom use and violence. There is insufficient space here to explore the historical roots of Caribbean gender norms and interpersonal violence, but they are deep rooted and a long process of social and economic reform accompanied by participatory education are needed to develop social relationships between men and women based on mutuality and respect (Le Franc, Samms-Vaughan *et al* 2008). Solutions to VAW should encompass approaches to promoting peace in interpersonal relationships in general (Clarke and Sealy-Burke 2005).

At the programmatic level, there is the possibility of intervening with a focus on people who are vulnerable to violence and HIV. Those who appear from the literature review to be particularly vulnerable include women and girls who have experienced abuse in childhood, those engaged in transactional sex or sex work and women with low economic security who are HIV positive. A range of psycho-social support services and educational activities should be developed in partnership with these women, and economic empowerment initiatives may assist in addressing risks of HIV and VAW. A cluster-randomised control trial in South Africa, for instance, found that a microfinance programme for women accompanied by interactive educational sessions on couple communication and sexual health reduced intimate partner violence by 55% and significantly reduced sexual risk behaviour (Kim, Watts *et al* 2007). There is also a need to develop screening and referral protocols so that women who attend services for HIV can easily access services for VAW, and vice versa (Development Connections, UNIFEM *et al*, 2008). Capacity-building should ensure that referral does not cause additional trauma, and that confidentiality is upheld.

In Dominica, HIV and VAW fell under the purview of different ministries, but strong relationships and informal referral systems between agencies were apparent. There were, however, clear resource deficiencies in the provision of shelter and other services for VAW survivors. In Barbados, agencies addressing either HIV or VAW did not have high levels of interaction with each other, except in cases of rape or child abuse. In neither Dominica nor Barbados did protocols or training exist to assist in integration of HIV and VAW services. Interviewees in both countries expressed high awareness of gender issues leading to HIV or VAW vulnerability, and each was involved in provision of education or support to help overcome vulnerability.

Our literature review revealed Caribbean cross-sectional studies that have shown links between VAW or child abuse with risky sexual practices or STI. The research has generally not made the connection between HIV and VAW in an explicit or methodologically rigorous way. In contrast, a study with women in South Africa showed that after controlling for other factors, transactional sex was associated with violence by male intimate partners, and also with HIV seropositivity. In keeping with research in the Caribbean, the authors concluded that transactional sex may place women at increased risk for HIV, and is associated with gender-based violence (Dunkle, Jewkes *et al* 2004). Later research by the same authors used a stronger, longitudinal methodology, examining associations between incidence of HIV and VAW (controlling for other factors) in data from an intervention trial. A significant relationship was found between intimate partner violence against women (Jewkes, Dunkle *et al* 2010). Longitudinal studies recording associations between VAW and HIV incidence in the Caribbean may be difficult to achieve given that very large sample sizes would be needed because of lower HIV incidence than in settings such as South Africa. Nevertheless, longitudinal research could be conducted to identify associations between VAW and other risk factors for HIV such as STI and condom use.

Conclusion

Review of Caribbean literature and stakeholder interviews in Barbados and Dominica revealed little cusping of the issues of HIV and VAW in research, policy and practice. While existing research suggests some associations, there is a need for research to focus explicitly on the linkages. In Dominica and Barbados and among Caribbean regional bodies, agencies focussed predominantly either on HIV and VAW. While there is willingness to develop programmes that address both, the linkages were addressed only as a minor element of work. There is a need and potential for further work to address linkages between HIV and VAW in the Caribbean region.

References

- Abell, N., S. E. Rutledge, T. J. McCann and J. Padmore (2007). 'Examining HIV/AIDS provider stigma: assessing regional concerns in the islands of the Eastern Caribbean.' *AIDS Care* 19(2): 242-7.
- Adomakoh, S., S. Lewis, J. Sutherland, H. Fraser, K. Borysiewicz and N. Adomakoh (2003). 'HIV/AIDS related stigma, discrimination and denial - overview of key findings from a baseline review of forms, context, and consequences in Barbados.' *West Indian Medical Journal* 52 (Suppl 3): 17.
- Allen, C., D. D. Martinez, U. Wagner, K. McLetchie, A. D. Washington, T. Chapman-Smith and M. Wright (2002). 'The sexual behaviour of youth in Tobago. A report on the development of a health promotion project.' *West Indian Med J* 51(3): 197-9.
- Allen, C., R. McLean and K. Nurse (2004). 'The Caribbean, HIV/AIDS and Security.' *Caribbean Security in the Age of Terror*. I. L. Griffith. Kingston, Ian Randle: 219-51.
- Allen, C., K. McLetchie, A. De Gazon Washington and T. Chapman-Smith (2000). 'The Sexual Health Needs of Youth in Tobago.' Port of Spain, Trinidad and Tobago, Family Planning Association of Trinidad and Tobago, Tobago AIDS Society and Caribbean Epidemiology Centre.
- Allen, C., K. McLetchie, P. Russell-Brown, D. Da Costa Martinez, H.-U. Wagner, A. De Gazon Washington and T. Chapman-Smith (2000). 'HIV and Youth in Tobago: Silence and Secrecy in a Small Island.' *Int AIDS Conf* Durban, South Africa, Book of the XIII International AIDS Conference: Oral presentation: Abstract MoOrD263.

- Allen, C. F. (2007). 'Quality of Life of People Living with HIV/ AIDS in the Caribbean.' Final report from CHRC. St. Augustine and Port of Spain, Trinidad and Tobago, Caribbean Health Research Council and Caribbean Regional Network of People Living with HIV.
- Allen, C. F., M. Edwards, L. M. Williamson, W. Kitson-Piggott, H. U. Wagner, B. Camara and C. J. Hospedales (2006). 'Sexually transmitted infection service use and risk factors for HIV infection among female sex workers in Georgetown, Guyana.' *J Acquir Immune Defic Syndr* 43(1): 96-101.
- Allen, C. F., Y. Simon, J. Edwards and D. T. Simeon (2010). 'Factors associated with condom use: economic security and positive prevention among people living with HIV/AIDS in the Caribbean.' *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV* 22(11): 1386 - 1394.
- Bailey, W., E. Le Franc and C. Branche (1998). 'Partnering and violence.' *Caribbean Dialogue: A Policy Bulletin of Caribbean Affairs* 4(2): 11-18.
- Barrow, C. (2006). 'Adolescent Girls, Sexuality and HIV/AIDS in Barbados: the Case for Reconfiguring Research and Policy'. *Caribbean Journal of Social Work* 5: 62-80.
- Barrow, C. (2007). 'Adolescent girls, sexual culture, risk and HIV in Barbados.' SALISES 8th annual conference. Sir Arthur Lewis Institute of Social and Economic Studies, Barbados, University of the West Indies.
- Blum, R. and M. Ireland (2004). 'Reducing risk, increasing protective factors: findings from the Caribbean Youth Health Survey.' *Journal of Adolescent Health* 35(6): 493-500.
- Bombereau, G. and C. Allen (2008). 'Social and cultural factors driving the HIV epidemic in the Caribbean literature review.' St. Augustine, Trinidad and Tobago, Caribbean Health Research Council. .
- Borland, R., L. Faas, D. Marshall, R. McLean, M. Schroen, M. Smit and T. Valerio (2004). 'HIV/AIDS and mobile populations in the Caribbean : a baseline assessment.' Geneva, Switzerland and Santo Domingo, Dominican Republic, International Organisation for Migration.
- Bureau of Gender Affairs (2010). 'Survey of Domestic Violence in Barbados.' Bridgetown, Barbados, Ministry of Youth, Family and Sports.
- Cabezas, A. (1999). 'Women's Work is Never Done: Sex Tourism in Sosua, the Dominican Republic .' *Sun, Sex and Gold: Tourism and Sex Work in the Caribbean*. K. Kempadoo. Oxford, Rowman and Littlefield: 93-123.
- Caribbean Health Research Council (2008) Database of Caribbean HIV/ AIDS Research.' <http://www.chrc-caribbean.org/Databases.php>
- Chevannes, B. (2001). *Learning to be a man: culture, socialisation and gender identity in five Caribbean communities*. Mona, Jamaica: University of the West Indies Press.

- Clarke, R. and J. Sealy-Burke (2005). 'Eliminating Gender-Based Violence, Ensuring Equality: UNIFEM/ ECLAC Regional Assessment of Actions to End Violence Against Women in the Caribbean.' Hastings, Barbados, United Nations Development Fund for Women (UNIFEM).
- Development Connections, UNIFEM, Pan American Health Organisation, Inter-American Commission of Women and Latin American and Caribbean Women's Health Network (2008). *The Multiple Faces of the Intersections between HIV and Violence Against Women*. Washington DC, Development Connections.
- Douglas, K., A. Braithwaite, V. Patterson, I. Wilson and J. Figueroa (1997). 'Risk factors associated with STD/HIV Seropositivity among female commercial sex workers (FCSWs) - Implications for an integrated intervention strategy.' *West Indian Medical Journal* 46 (Suppl 2): 12-13.
- Dunkle, K. L., R. K. Jewkes, H. C. Brown, G. E. Gray, J. A. McIntyre and S. D. Harlow (2004). 'Transactional sex among women in Soweto, South Africa: prevalence, risk factors and association with HIV infection.' *Social Science & Medicine* 59(8): 1581-1592.
- Farmer, P. (1999). *Infections and inequalities: The Modern Plagues*. Berkeley, University of California Press.
- Gage, A. J. (2005). 'Women's experience of intimate partner violence in Haiti.' *Social Science & Medicine* 61(2): 343-64.
- Hutchinson, G. A. and E. M. Jameson (2006). 'Prevalence and risk factors for HIV infection in pregnant women in north Trinidad.' *West Indian Medical Journal* 55(5): 346-50.
- Hutchinson, M. K., L. S. Jemmott, E. B. Wood, H. Hewitt, E. Kawha, N. Waldron and B. Bonaparte (2007). 'Culture-specific factors contributing to HIV risk among Jamaican adolescents.' *Journal of the Association of Nurses in AIDS Care* 18(2): 35-47.
- Jewkes, R., K. Dunkle, M. Nduna and N. Shai (2010). 'Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: A cohort study.' *Lancet* 3(376): 41-48.
- Kempadoo, K. (2004). *Sexing the Caribbean: Gender, Race, and Sexual Labor*. London: Routledge
- Kempadoo, K. and L. Dunn (2001). 'Factors that shape the initiation of early sexual activity among adolescent girls and boys: a study of three communities in Jamaica.' Mona, Jamaica, Centre for Gender and Development Studies, University of the West Indies.
- Kim, J. C., C. H. Watts, J. R. Hargreaves, L. X. Ndhlovu, G. Phetla, L. A. Morison, J. Busza, J. D. H. Porter and P. Pronyk (2007). 'Understanding the Impact of a Microfinance-Based Intervention on Women's Empowerment and the Reduction of Intimate Partner Violence in South Africa.' *American Journal of Public Health* 97(10): 1794-1802.

- Kishor, S. and K. Johnson (2006). 'Reproductive health and domestic violence: are the poorest women uniquely disadvantaged?' *Demography* 43(2): 293-307.
- Kurtz, S. P., K. G. Douglas and Y. Lugo (2005). 'Sexual risks and concerns about AIDS among adolescents in Anguilla.' *AIDS Care* 17 Suppl 1: S36-44.
- Le Franc, E., M. Samms-Vaughan, I. Hambleton, K. Fox and D. Brown (2008). 'Interpersonal violence in three Caribbean countries - Barbados, Jamaica and Trinidad and Tobago.' *Revista Panamericana de Salud Publica* 24(6): 409-21.
- Le Franc, E., G. E. Wyatt, C. Chambers, D. Eldemire, B. Bain and H. Ricketts (1996). 'Working women's sexual risk taking in Jamaica.' *Social Science & Medicine* 42(10): 1411-7.
- Locke, T. F., G. E. Wyatt, N. Green, J. K. Williams, E. LeFranc, M. D. Newcomb and D. Simeon (2004). 'Predictors of condom use among Jamaican men and women.' *International Conference on AIDS*. Bangkok, Thailand.
- Mayorga, L. and P. Velasquez (1999). 'Bleak Pasts, Bleak Futures: Life Paths of Thirteen Young Prostitutes in Cartagena, Colombia' 4 in *Sun, Sex and Gold: Tourism and Sex Work in the Caribbean*. K. Kempadoo. Oxford, Rowman and Littlefield: 157-82.
- Miric, M. (2004). 'Self-esteem, depression and social support perception related to felt stigma levels among Persons Living with HIV/AIDS in the Dominican Republic.' *International Conference on AIDS*. Bangkok, Thailand.
- Norman, L. (2003). 'Predictors of consistent condom use: a hierarchical analysis of adults from Kenya, Tanzania and Trinidad.' *International Journal of STD and AIDS* 14(9): 584-590.
- Pan Caribbean Partnership Against HIV/ AIDS (2008). 'Caribbean Regional Strategic Framework on HIV and AIDS 2008-2012.' Georgetown, Guyana, Caribbean Community (CARICOM).
- Persaud, N. E., W. Klaskala, T. Tewari, J. Shultz and M. Baum (1999). 'Drug use and syphilis. Co-factors for HIV transmission among commercial sex workers in Guyana.' *West Indian Medical Journal* 48(2): 52-6.
- Plummer, D. and J. Simpson (2007). 'HIV/AIDS and Caribbean masculinities.' *Financing Gender Equality*. Commonwealth Secretariat. London, Nexus: 68-71
- Ragsdale, A. and T. Anders (1999). 'The Muchachas of Orange Walk Town, Belize' In *Sun, Sex and Gold: Tourism and Sex Work in the Caribbean*, K. Kempadoo. Oxford, Rowman and Littlefield: 217-36.
- Ramlal, A., E. Champagnie, K. Boyce, M. Williams and S. King (1985). "Vulvovaginitis, the Gonococcus, and Child Abuse." *West Indian Medical Journal* 34(Suppl): 49.

- Red Thread Women's Development Programme (1999). 'Givin' Lil' Bit fuh Lil' Bit: Women and Sex Work in Guyana.' *In Sun, Sex and Gold: Tourism and Sex Work in the Caribbean*, K. Kempadoo. Oxford, Rowman and Littlefield: 263-290.
- Smith Fawzi, M., W. Lamberta, J. Singlera, Y. Tanaghoa, F. Le'andre, P. Nevila, D. Bertranda, M. Claudea, J. Bertranda, M. Louissaint, L. Jeannis, J. Mukherjee, S. Goldie, J. Salazara and P. Farmer (2005). 'Factors associated with forced sex among women accessing health services in rural Haiti: implications for the prevention of HIV infection and other sexually transmitted diseases' *Social Science & Medicine* 60: 679-89.
- UNAIDS (2008). 'Report on the global AIDS epidemic.' Geneva, Joint United Nations Programme on HIV/ AIDS.
- UNAIDS (2010). 'Report on the global AIDS epidemic.' Geneva, UNAIDS.
- UNAIDS Caribbean Regional Support Team (2011). 'Keeping Score III: the Voice of the Caribbean People.' Port of Spain.

Drug Use and Risky Sexual Behaviour in Tertiary
Institutions in Barbados:
Personal and 'Liberal Campus' Effects

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Abstract

Theoretical and empirical linkages have been made between drug use and risky sexual behaviour, and the relationship these have to the spread of sexually transmitted infections (STIs), especially HIV. In seeking to investigate the prevalence of these behaviours and their relationships, the study draws on a survey of 942 tertiary level students in Barbados conducted in 2007.² While the study details drug use prevalence and sexual behaviour, and the relationship between the two, the issues of exposure to 'campus life' and personal characteristics are also investigated, revealing that type of campus and sex both had an effect on risk levels, with females indirectly at risk from drug use and consequent risky sexual behaviour.

Key words: drug use, sexual behaviour, sexually transmitted infections (STIs).

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² Data collection and analysis facilitated by the Barbados National Council on Substance Abuse (NCSA) in collaboration with the Barbados National HIV/AIDS Commission.

Introduction

The risky sexual behaviour that can accompany drug use is a key element in the contraction of human immunodeficiency virus (HIV) and AIDS (Howard, Taylor, Ganikos, Holder, Godwin and Taylor, 1988; Adelekan, Green, Dagupta, Tallack, Stimson and Wells, 1996; Hall, Holmqvist, Simon and Sherry, 2004; Cismaru, Lavack and Markewich, 2008) given the loss of inhibition that drug use incurs (Kaly, Heesaker and Frost, 2002). In addition to these risks, for college level students and youth in general, drug use has also been linked with other negative outcomes, including academic underachievement and dropout (Jessor and Jessor 1977, Dryfoss 1990), societal problems, negative health effects and drug related motor accidents (Cismaru *et al.*, 2008).

The high-risk sexual behaviours identified include: early initiation of sexual activity, multiple sexual partners (which Kaly *et al.* (2002) noted as having a positive relationship with alcohol use), unprotected sex and sex under the influence of drugs (legal or illegal). It has been shown that youth³ may become particularly vulnerable to HIV infection through impaired judgement that results in risky sexual behaviours that follow moments of ‘clouded consciousness’ associated with drug and alcohol abuse (CDC, 2002; Leigh and Stall, 1993).

Internationally, research has shown that there is a clear link between drug use and sexual behaviour among tertiary-level students (Kaly *et al.*, 2002; Broman, 2007). Kaly *et al.*, in an extensive review of the literature, established a link between exposure to a ‘socially liberal campus community’, where alcohol use and sexual activity were considered part of the ‘subculture’, and the potential for exposure to certain health risks. Broman (2007), in detailing some of the risky activities such as casual sex, multiple sex partners and a lack of condom use, noted that:

[T]hese behaviours have consistently been found to increase risk of HIV and other STDs among the general population, and college students in particular (para. 2).

³ The United Nations define youth as those persons between 15 and 24 years of age. However, definitions in use do not always follow this convention.

Zapolski, Cyders and Smith (2009) drew these thoughts together:

For many individuals, the transition into college involves new levels of freedom and independence...One consequence of this new independence is increased likelihood of engaging in risky behaviours (p.348)

In relating to Kaly *et al.*'s (2002) and Zapolski *et al.*'s (2009) insinuation that the campus environment had some effect on drug use and risky sexual behaviour, campuses where a less 'socially liberal community' was thought to exist were also included in the current study. This related to what are termed sixth form schools within the education framework in Barbados. These sixth form schools operate within secondary schools, but essentially provide tertiary education to similarly aged students as those in other tertiary institutions. Throughout the analysis, sixth form schools are referred to as 'Closed Campuses', due to the lack of movement into and out of by students and other persons not enrolled at the institution, and a higher level of supervision by staff. Other campuses are referred to as 'Open Campuses', as students and non-students are free to come and go, and indeed stay beyond normal operating hours as well as reside on campus. In addition, supervision is minimal and relates mainly to security issues. These institutions would be similar to those utilised in previous research on college students' behaviour. The analysis of these cohorts would therefore allow the testing of 'campus effects'.

Overall, the literature is clear in some of the linkages presented; drug use interferes with judgement and decision-making, and can lead to risky sexual behaviour. This in turn leads to greater exposure to the risk of contracting STIs and other non-health risks, as outlined above. In addition, the exposure to an environment where such behaviours are accepted as part of the 'subculture' further exacerbates this risk. While Kaly *et al.* examined the causal roots of this occurrence in their discussion of disinhibition theory⁴ and alcohol myopia theory⁵, the current paper is concerned with the

⁴ Disinhibition theory suggests that alcohol consumption induces risky behaviour due to a removal of inhibitions.

⁵ Alcohol myopia theory, while in congruence with disinhibition theory as to the link between alcohol consumption and risky behaviour, goes further in asserting that actual behaviour is the result of the dominance of certain cues over others.

correlate characteristics that are related to risky sexual behaviour, defined here as multiple sexual partners, unprotected sex, sex under the influence of drugs (legal or illegal) or sex with a drug user (Hall *et al.*, 2004; Leigh and Stall, 1993; Adelekan, 1996; Broman, 2007).

Framework of Analysis

Given that the link is made between drug use and risky sexual behaviour and increased exposure to the contraction of STIs, the current paper, drawing on the insinuated ‘campus effects’ and personal characteristics such as age, proposes that risky behaviour is a function of both **personal characteristics** and external environmental effects.⁶ In terms of personal characteristics, it is considered that younger persons neither have the power nor experience to respond adequately to relevant ‘cues’ for behavioural modification, considered important in alcohol myopia theory (Kaly *et al.*, 2002). However, this suggestion that younger persons are at greater risk of engaging in risky behaviours is not clear-cut. Cismaru *et al.* (2008), in relation to underage alcohol consumption, observed that overall alcohol consumption increases with age. This suggests that risk levels will actually increase with age if frequency and volume are considered as indicators of greater risk. However, within the current framework, it is proposed that the new freedoms identified by Zapolski *et al.* (2009), and a lack of experience to deal with Kaly *et al.*’s salient ‘cues’, may outweigh the other age effects identified by Cismaru *et al.*. Age will therefore be an important variable to investigate to identify the actual relationship to risky behaviour, whether it is positive or negative. In addition, gender, given power disparities that exist, will also be expected to play a crucial role. Suvivuo, Tossavainen and Kontula (2008:156) provided a rationale for this line of investigation with their observation that intoxication may not matter for females as they may be subject to the wishes of their partner:

⁶ Risky behaviour in this context encompasses drug use, risky sexual behaviour or both, that may increase an individual’s exposure to contracting STIs and other unwelcomed consequences.

‘The girls went along with their partner whether or not they were drunk. Responsibility for the situation was mainly with the partner’.

This finding suggests that females, while not partaking in alcohol use, may still however be at risk from risky sexual behaviour through the actions and wishes of their partner. In essence, they are indirectly at risk.

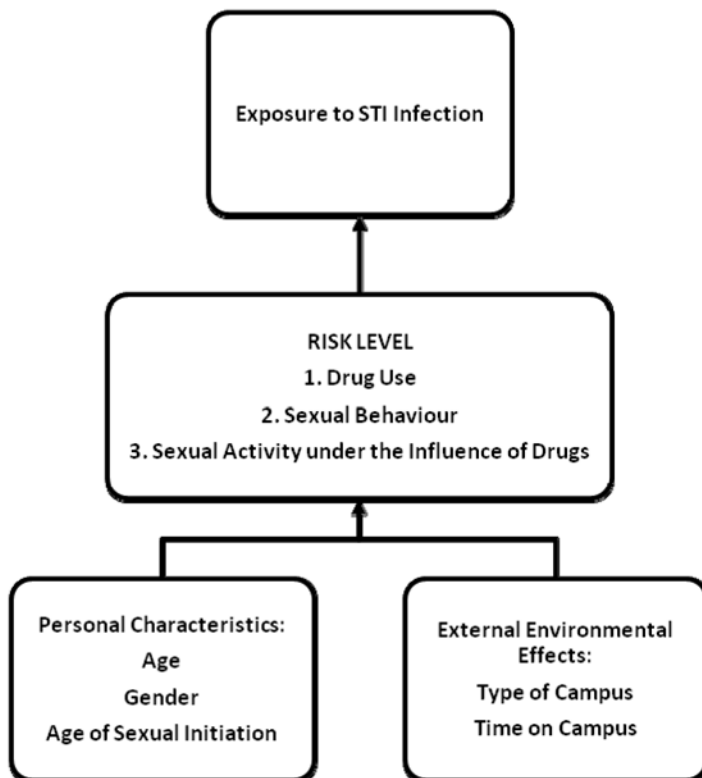
Another personal characteristic proposed is the age of sexual initiation. Adelekan *et al.* (1996) indicated that early initiation of sexual activity is associated with the contraction of HIV. Whereas Adelekan *et al.* (1996) categorised early sexual initiation as a component of high-risk sexual behaviours, it has been included here as an independent variable to test the relationship with *current* risky behaviour. Basically, the research is asking the question as to what is the relationship of age of sexual initiation to risky sexual behaviour, rather than stating that early sexual initiation is an element of risky sexual behaviour.

In turning to **external environmental effects**, Kaly *et al.*’s proposition of ‘liberal’ campus effects is tested through the categorisation of institutions as either Open Campuses or Closed Campuses. In addition, time spent on campus outside of formal instruction is also included. The rationale for these inclusions is related to the issue of exposure. If there is indeed a ‘campus effect’, greater exposure to it would be expected to increase the prevalence of either drug use or risky sexual behaviour, or both. The actual construction of these variables is discussed in the empirical section of the paper. The overall model is produced below diagrammatically.

It needs to be noted however that the process is not deterministic as persons may engage in risky sexual behaviour without direct drug use, through coercion, overt force or personal preference. If this issue is related to power, it may put females and younger students especially at risk.

Within this context, and in the development of interventions to deal with the spread of HIV, the following study seeks to investigate the current situation as regards tertiary students in Barbados, a small independent country in the Eastern Caribbean.

Figure 1: Personal Characteristics, External Environmental Effects and Exposure to STI Infection



Previous studies on drug use by non-tertiary students in Barbados have shown that 13% were currently using some form of illegal drug and the majority of this constituted the use of marijuana (approximately 6.1%) and inhalants (6.5%). In terms of legal drugs, more than one-third (34.0%) used alcohol (Douglas, 2006). Some students also reported having used illegal substances such as cocaine powder, crack, heroin, opium, hallucinogens and ecstasy (between 1% and 3.4%) (Douglas, 2006).

In terms of gender, male high school students generally consumed more alcohol than female students (Cismaru, 2008). However, although this is also true in Barbados, there were general increases in female consumption of alcohol over males between 2002 and 2006 of between 3% to 6% across all

indicators. This is a matter of concern, but so too is the way in which alcohol is consumed; overall 15.2% of students indicated binge drinking⁷ (16% of males and 14% of females) (Douglas, 2006).

Marijuana use among high school students in the Caribbean is high and exceeds tobacco use (CICAD 2007). In Barbados, lifetime prevalence of marijuana use was 17.7%. About one in every six students reported having tried marijuana. The annual prevalence was 10.8% and the current use prevalence was 6% (about one in every 15 students were currently using marijuana).

A number of studies in Barbados have also shown that many people do not regard occasional or experimental marijuana use as being risky and there is a general perception that access to marijuana is relatively easy (NCSA, 2006). These factors, and the growing number of people seeking treatment for marijuana abuse in Barbados, indicate that marijuana use is an issue that demands attention (Panzarella, 2010). In relation to sexual behaviour among youth in Barbados, the National Youth Knowledge Attitude Behaviour and Practices Survey 2001 conducted among a sample of 1132 young people ages 15-29 years showed that 83.6% reported having had sexual intercourse (Carter, 2001). For condom use, 45.8% used condoms 'sometimes' while 17.1% indicated never using condoms.

In seeking to explore these issues as they relate to tertiary students, the following paper is structured as follows. Following an overview of the sampling and survey methodology, the paper presents the main results of the survey among tertiary level students enrolled in formal education institutions in Barbados. The results are presented in three sections covering results for the entire sample; results disaggregated by type of institution (Open Campus versus Closed Campus⁸); followed by the presentation of significant differences to emerge from the analysis of gender. This is followed by a

⁷ Binge drinking is defined by Douglas (2006) as more than 5 drinks in one sitting.

⁸ Open Campuses are considered those that allow the free movement of students in and out of the campus as with the University of the West Indies, the Barbados Community College, the Samuel Jackman Prescod Polytechnic, Erdiston Teacher Training College, and BIMAP. The Sixth Form Colleges are considered Closed Campuses as these movements are restricted. It is considered that these distinctions may have an influence on drug use and sexual behaviour.

regression analysis to test the framework proposed above. The paper concludes with some preliminary policy recommendations.

Sampling and Survey Methodology

In order to achieve an accurate representation of the relationship between drug use and risky sexual behaviour among tertiary students in Barbados, all the formal tertiary level institutions were selected for inclusion in the initial phase of the research. This included nine (9) institutions, including four (4) sixth form schools. These institutions formed the population from which the samples were drawn in the first instance. In total, based on registration, a population of 11,618 tertiary level students were identified. Due to differences in total enrolment at the various institutions, it was considered prudent to undertake oversampling in select institutions in order to obtain a sample which could be utilised for statistical analysis at the institutional level as well as overall. In aggregating these specific sample levels, the interim sample target was 1,246. Following the refusal of two (2) institutions to participate, this sample size target was reduced to 1,162, or 10% of the population. The confidence interval in this case is $\pm 2.75\%$.

For the actual selection of participants, students were selected at random in a variety of ways. For the sixth form schools, participants were selected by drawing of lots during daily registration, while for the other institutions, specific classrooms were selected at random and interviews conducted at selected times of day to ensure an even spread across departments and faculties. In total, 942 usable responses were received, representing an 81% success rate.

Full Sample Results

Respondent Characteristics

The following analysis is based on data from the full sample of 942 responses. Overall the sample respondents demonstrated a distribution by sex not significantly different from the national average with a sample distribution of 56.6% female and 43.4% male. The relevant national averages were 61% and 39% respectively in 2000 (Barbados Statistical Service, 2004). The median age for the entire sample was 20 years, with a minimum of 16 years

and a maximum of 61 years, while the median age for Closed and Open Campus respondents were 17 years and 20 years respectively. The majority of the sample considered their ethnicity to be African (89.9%), while 5.2% classified themselves as 'Other'.

In terms of registration, 68.1% were full-time students. In looking further at the issue of exposure to campus life, exposure to the physical confines of the institution, respondents were also asked to indicate the average amount of time spent on-campus outside of normal learning activities. While 20.7% indicated that they did not spend any extra time on campus, the majority (43.9%) spent 5 or less hours on campus outside of normal learning activities. Over one-quarter of respondents (25.5%) indicated that they spent between 6 and 10 extra hours on campus, indicating a high level of exposure to 'campus life'.

The majority of respondents were studying for either a First or an Associate Degree (62.2%). As regards year of study, 48.1% of respondents were in their first year of study, 37.4% were in their second year and 11.7% were in their third year. Only 2.8% were in their fourth year of study or above.

Drug Use Patterns

In seeking to assess the level and character of drug use (legal and illegal) among tertiary level students, respondents were asked to indicate the frequency of use of a selection of drugs; age of first use; and location of most frequent use. The table below presents the results for frequency of use and age of first use for a selection of legal drugs and indicates that the least utilised legal drugs were Inhalants, Fanta and Cigarettes. Conversely, the most utilised legal drugs were Pain Killers, and Low and Medium Alcohol. The overall average age of first use of these legal drugs, for those indicating some level of use, was 14 years of age.

Table 1: Legal Drugs- Frequency and Age of First Use (%)

Frequency of Use of:	Never	Seldom	Monthly	Weekly	Daily	Not Stated	Avg. Age of First Use (years)	Prevalence Rate*
Low Alcohol	29.4	50.2	8.5	8.3	1.8	1.9	14	70.6
Medium Alcohol	34.9	48.4	9.2	5.2	.3	1.9	15	65.1
High Alcohol	45.9	37.8	8.0	5.8	.6	1.9	16	54.1
Cigarettes	87.2	8.7	.5	.8	2.0	.8	15	12.8
Pain killers	24.1	50.4	18.4	3.6	.8	2.7	12	75.9
Prescribed drugs	65.7	27.6	2.4	.2	1.9	2.2	13	34.3
Inhalants	92.4	4.7	.5	.6	.5	1.4	10	7.6
Fanta ^{9**}	90.8	5.6	.6	.8	1.9	0.4	13	9.2

*Represents the percentage of respondents indicating some level of use.

**It needs to be noted that although there is ambiguity surrounding the status of Fanta as a drug, it is not illegal under the laws of Barbados and included here in the analysis of legal drug use.

In terms of the location of use of these legal drugs, the table below shows the main results to emerge from the survey. The most prominent single location of use was the home, with social events being the main location for the use of alcohol of all strengths. Interestingly, and of core interest to the current research, use on Campus demonstrated one of the lowest responses, with the exception of the use of inhalants, but this only accounted for 15 persons or 1.6% of the total sample. For Fanta, the main location of use was in peer group settings, within the community or at a friend's house accounting for 55.1%. This was followed by use in the home (33.3%).

⁹ *Fanta* is a colloquial term for a local plant that is dried and smoked like tobacco or marijuana

Table 2: Legal Drugs- Location of Most Frequent Use (%)

	Home	On Campus	Community	Friend's House	Sporting Events	Social Events
Low Alcohol	33.3	1.1	6.1	4.6	2.9	52.0
Medium Alcohol	37.5	0.7	4.7	2.4	1.3	53.5
High Alcohol	24.7	1.3	7.2	2.7	2.3	61.8
Cigarettes	40.3	8.4	14.3	8.4	1.7	26.9
Pain killers	98.1	1.2	0.2	-	0.5	-
Prescribed drugs	97.6	1.7	-	0.3	0.3	-
Inhalants	74.2	24.2	-	1.6	-	-
Fanta	33.3	5.8	40.6	14.5	1.4	4.3

In terms of illegal drugs, participants were also requested to provide information related to frequency of use, age of first use, and location of most frequent use. The results demonstrated that the only illegal drug with any significant level of use was marijuana (23% prevalence rate), with an average age of first use of 15 years. Weekly or daily use accounted for nearly 5% of the sample. As the data for the other listed drugs only returned responses from between seven (7) and eleven (11) respondents, this data is not presented as it relates to age of use, location of use, and method of intake. The only listed drug for which this data is robust enough for presentation is marijuana. As with fanta, marijuana use was mostly in peer group settings (in the community or at a friend's house) (44.5%) or in the home (29.7%). The next most frequent response was for social events (16.8%). Only 6.4% of marijuana users indicated that they used the drug on campus.

Sexual Activity Patterns

Apart from indicating drug use patterns, respondents were also asked about their sexual activity. Of the 942 respondents to the survey, only 571 indicated that they had ever had sex (60.6%). The following analysis is therefore based solely on these responses.

In terms of the age of first sexual activity, the average age was 16 years old, while the median number of sexual partners in the last 30 days was one (1), with a mean of 1.7. On average, male respondents indicated that they had 3.4 female sexual partners in the last year, and 8.3 in the last 5 years, while females indicated that they had 1.4 male partners in the last year and 2.3 male partners in the last 5 years. Nearly eighty percent (78.6%) of respondents indicated that their sexual activity was currently confined to one partner, while the median number of partners at any one time was also one (1), with partners mostly between 16 and 25 years of age (63.2%).

In terms of the practice of safe sex, nearly one-half (49.1%) of respondents indicated that they only used a condom during sex ‘Sometimes’, and 13.7% ‘Never’ used a condom during sex. In addition, and confirming this result, when asked as to how often they had unprotected sex, 30.9% said ‘Never’, while 41.9% said ‘Occasionally’ and 19.5% responded ‘Most of the time’. Contrasting these results to some degree is the fact that 59% of respondents indicated that they have refused to have sex in the past because no condom was available, and 54.3% of males indicated that their partner had requested that they wear a condom at some point. As concerns the preference for using a condom, only 28.2% indicated that they liked using a condom, while 28.8% said only sometimes did they like to use a condom.

Despite this apparent ‘risky sexual behaviour’, where unprotected sex is occurring on a regular basis, only 5.9% of respondents indicated that they had contracted a sexually transmitted infection (STI) from their partner at any time. This was based on 556 responses. Of those that had contracted an STI, the average age of contraction was 21 years.

Related to these issues, respondents were also asked to indicate their importance rating for a number of issues related to condom use. The results are shown in the table below.

Table 3: Importance of Condom Use (%)

Importance of Using a Condom to:	Extremely Important	Very Important	Important	Not Very Important	Not Important
Avoid pregnancy	66.6	14.4	11.1	2.7	5.2
Avoid STIs	88.2	8.7	2.6	.2	.4
Avoid HIV	92.1	5.7	1.6	-	.6
Enjoy sex	20.6	5.5	9.3	19.5	45.1

As the results demonstrate, respondents placed a high degree of importance on condom use to avoid STIs and HIV, with a lower rating for avoiding pregnancy. However, a very low rating for wearing a condom to enjoy sex may indicate that respondents feel constrained in their sexual pleasure by the use of a condom, although they recognise the importance of its use. If these rational considerations are curtailed through drug use, condom use in this regard may be reduced. Other sexual behavioural traits were investigated through the survey instrument. These are shown in the table below.

Table 4: Sexual Behavioural Traits (%)

Issue	Yes	No	No Response
Had sex on campus	14.8	81.0	4.3
Always insist on condom use	28.6	55.5	15.9
Ever refused sex because no condom was available	40.2	48.0	11.8
Ever insisted on condom use	57.3	30.9	11.8
Ever had sex without a condom due to partner's wish	34.0	59.2	6.9
Solely Male's responsibility to provide a condom	12.9	83.7	3.4
Solely Female's responsibility to provide a condom	6.9	89.1	3.9
Responsibility of both partners to ensure condom use	92.1	4.8	3.1

The main issue of concern to emerge from the results above are that respondents are not always insisting on condom use. Especially concerning is that over one-third of respondents have had sex without a condom due to a partner's wish. However, as a note of encouragement, respondents for the most part believe it is the responsibility of both partners to ensure condom use, although this may not always occur in practice.

Respondents were also asked for the main reasons that they had sex. The majority indicated it was for pleasure (78.4%), while pressure from partner accounted for 7.7% of responses, and to get pregnant accounted for 6.7%. Sex for rewards (money and gifts) accounted for 3.3%.

Drug Use and Sexual Behaviour

The main purpose of the survey was to garner information on drug use and sexual behaviour among respondents. A series of questions were asked as to respondents' and their partners' behaviour. The main results are discussed below.

Overall, 15.9% of all respondents indicated that they had engaged in sex while drunk and 10% indicated that they had done so while 'high'. More specifically, for those that demonstrated this type of behaviour, they were requested to indicate the type of drug with which they were under the influence. These results are shown in the table below.

Table 5: Drug Use and Sexual Activity: Type of Drug (%)

Respondent had sex under the influence of...	Yes	No	Number of Responses
Either a legal or illegal drug	22.1	77.9	551
Low Alcohol	87.2	12.8	94
Medium Alcohol	83.1	16.9	59
High Alcohol	86.8	13.2	76
Pain killers	75.0	25.0	32
Prescribed drugs	42.9	57.1	14
Fanta	60.0	40.0	20
Marijuana	85.7	14.3	63

As the table above shows, the main drugs which respondents were under the influence of when they engaged in sex were Alcohol (all strengths), followed by Marijuana, Pain Killers and Fanta.

In terms of sexual partners, respondents were also asked whether their partners used legal or illegal drugs, and the frequency with which they used the various drugs. Nearly forty-five percent (44.8%) of respondents indicated that their partners used legal or illegal drugs, the table below outlines their frequency of use.

Table 6: Drug Use and Sexual Activity: Partner’s Drug Use Frequencies (%)

Partner Uses...	Never	Seldom	Monthly	Weekly	Daily	Don’t Know	Partner’s Prevalence
Low Alcohol	5.9	45.5	14.4	12.6	7.2	14.4	79.7
Medium Alcohol	5.2	45.8	17.7	10.4	5.2	15.6	79.1
High Alcohol	8.9	43.0	15.1	12.3	5.0	15.6	75.4
Pain killers	20.1	46.3	8.1	2.7	2.0	20.8	59.1
Prescribed drugs	22.2	42.1	5.6	-	3.2	27.0	50.9
Inhalants	62.1	5.3	1.1	-	4.2	27.4	10.6
Fanta	58.2	7.3	1.8	3.6	12.7	16.4	25.4
Marijuana	26.5	24.7	4.2	14.5	18.1	12.0	61.5
Cocaine- powder	74.3	3.0	1.0	1.0	2.0	18.8	7.0
Cocaine- crack	76.5	1.0	-	1.0	2.0	19.4	4.0
Heroin	77.3	1.0	-	1.0	1.0	19.6	3.0
Ecstasy	77.1	3.1	-	-	-	19.8	3.1

*Represents the percentage of respondents indicating some level of use among their partner.

As the table demonstrates, the majority of respondents’ sexual partners use legal drugs, although on a seldom basis, while, with the exception of marijuana, the majority do not use illegal drugs. Overall legal drug use appears to occur less than once a month, while illegal drugs are seldom used.

Campus Influences

During discussions in the planning stages of the data collection, it was considered that the campus environment may have an influence on the variables of interest, drug use and risky sexual behaviour, due to ‘liberal’ campus effects, as discussed above. In order to investigate whether any such influential relationship exists, the institutions included in the survey were categorised as either Open Campus or Closed Campus. The data was then analysed to determine whether any significant differences between the two types of institutions existed as it related to drug use and risky sexual behaviour. In addition, data was also analysed according to the amount of non-instruction time the respondents spent on campus.

Following an analysis of all continuous variables, only age of first use of a selection of drugs demonstrated any significant differences. These drugs, relevant ages and test statistic values are shown in the table below.

Table 7: Significant Differences between Age of First Use and Campus Type (%)

Age of First Use of...	Closed Campus Average Age	Open Campus Average Age	Test Statistic (t-test)
Low Alcohol	12.6	14.4	3.33
Medium Alcohol	12.8	15.2	4.33
High Alcohol	14.2	16.2	3.46
Pain Killers	10.4	12.1	3.17
Prescribed Drugs	9.3	14.2	3.43

All test statistics significant at the 5% level.

As the table above demonstrates, Closed Campus respondents' first use of the drugs shown occurred at a significantly lower age than their Open Campus colleagues.¹⁰

Table 8: Use of Fanta by Campus Type (%)

Type of Campus	Never Used Fanta	Have Used Fanta
Closed Campus	95.3	4.7
Open Campus	89.9	10.1
Average	90.6	9.4

In terms of Fanta use, it appears that this was less prevalent among Closed Campus respondents than Open Campus respondents (Chi-squared asymptotic significance of 0.077). The same was true for the illegal drug marijuana, as shown below, where the Chi-Squared asymptotic significance was 0.009.

Table 9: Use of Marijuana by Campus Type (%)

Type of Campus	Never Used Marijuana	Have Used Marijuana
Closed Campus	86.9	13.1
Open Campus	75.5	24.5
Average	77.0	23.0

¹⁰As this activity occurred, for the most part, before enrolment at the relevant institutions, no level of causality can be related to Campus Type in this instance.

In addition to these drug related issues, significant differences were also seen as it related to sexual activity, with significantly higher proportion of Closed Campus respondents indicating that they had never had sex (asymptotic significance 0.000), as shown in the table below.

Table 10: Sexual Activity by Campus Type (%)

Type of Campus	Never Had Sex	Have Had Sex
Closed Campus	67.9	32.1
Open Campus	29.0	71.0
Average	34.1	65.9

Due to the low level of sexual activity among Closed Campus respondents, all other sex-related variables did not present sufficient numbers on which to conduct statistically significant tests.

In reviewing the results to emerge from an analysis of time spent on campus outside of normal instruction, only one significant difference was seen with those spending more time on campus having had sex on campus, as shown in the table below. Although the significant differences found only relate to time spent on campus, for clarity, the results are presented below in relation to type of campus.¹¹

Table 11: Sexual Activity on Campus by Time on Campus and Type of Campus (%)

Time on Campus	Never Had Sex on Campus			Had Sex on Campus		
	Type of Campus			Type of Campus		
	Closed	Open	<i>Average</i>	Closed	Open	<i>Average</i>
5 hours or less per week	86.7	88.4	88.4	13.3	11.6	11.6
6 hours or more per week	76.5	78.4	78.2	23.5	21.6	21.8
Average	81.2	84.9	84.7	18.8	15.1	15.3

¹¹ Given the relatively small number of respondents for Closed Campus, these results should only be considered descriptive and not causal.

The results in relation to time spent on campus indicate that those spending 6 or more hours on campus demonstrated a significantly higher incidence of having had sex on campus.

In relation to the environmental effects proposed in relation to the link between drug use and risky sexual behaviour, and the type of campus, no significant differences were seen. As the table below outlines, the proportion of Closed Campus respondents that had sex while under the influence of drugs is not significantly different from Open Campus respondents.

Table 12: Sex Under the Influence of Drugs and Type of Campus (%)

Type of Campus	Never Had Sex under the Influence of Drugs	Had Sex under the Influence of Drugs
Closed Campus	20.0	80.0
Open Campus	22.3	77.7
Average	22.1	77.9

However, these results need to be taken in light of the prevalence of sexual activity, with only 32% of Closed Campus respondents ever having sex as opposed to 71% of Open Campus respondents. These results suggest that once initiation of sex has occurred, which is more likely for Open Campus respondents, there is no difference in the practice of sex under the influence of drugs. Taken together, these results suggest that there is some type of environmental effect as it relates to whether the campus is Open or Closed.

The results of this analysis need to be considered in light of the age differences seen between Open and Closed campuses, where the median ages were 20 years and 17 years respectively. It can be argued that this age difference, and not the environmental effect, could be the cause of the differences seen. This issue is addressed in the development of the regression model below and reveals that while there is a correlation, this is minor in the construct as revealed by the diagnostics outlined below in the relevant section.

Gender Differences

In order to delve deeper into the character of the sample, sex of respondent was tested against the main variables of interest as it related to drug use and risky sexual behaviour. Many of these variables are strongly interrelated

and were utilised in this manner to confirm related responses throughout the questionnaire. The main significant results and related test statistics are shown in the tables below.

Table 13: Significant Differences between Sex of Respondent and a Selection of Continuous Variables

Continuous Variable	Male Average	Female Average	Test Statistic (t-test)
Age of first sexual experience	15.2 years	16.9 years	-5.2
Number of sexual partners in last 30 days	2.4	1.1	3.9
Average age of sexual partners	23 years	28 years	-4.9
All test statistics significant at the 5% level			

As the results above show, females had their first sexual experience later in life, had fewer sexual partners in the last 30 days, and their sexual partners were on average older. For males in the sample, their sexual partners were on average the same age.¹²

In terms of the categorical variables tested in the survey related to frequency of practice for a variety of activities (Never to Daily), these were recoded into dichotomous variables to give an indication of whether the respondent had ever participated in the activity of interest. These results would therefore then be presented as ‘Never’ or ‘Some Activity’, rather than the categorical scale used previously. For the ‘yes/no’ responses, these were tested without any further recoding. The results of this analysis are presented below.

¹² Average age of respondents was 22.5 years (22 years for females; 23 for males).

Table 14: Significant Differences between Sex and a Selection of Categorical Variables (%)

Categorical Variable	Male Average	Female Average	Asymptotic Significance
Current sexual activity was confined to one partner	72.4	95.0	0.000
Had sex on campus	26.4	7.0	0.000
Always insisting on using a condom during sex	22.4	39.8	0.001
Refused by partner to have sex because no condom available	55.7	37.7	0.000
Partner uses legal or illegal drugs	29.6	56.6	0.000
Uses Low Alcohol	77.9	65.2	0.000
Uses Medium Alcohol	69.9	61.6	0.011
Uses High Alcohol	63.3	47.0	0.000
Uses Cigarettes	17.4	9.3	0.000
Uses Pain killers	66.9	82.8	0.000
Uses Fanta	15.5	4.7	0.000
Uses Marijuana	30.1	17.7	0.000
Had unprotected sex	64.3	72.7	0.040
Had sex under the influence of drugs	25.6	19.6	0.093

The results of the analysis appear to demonstrate that females have less sexual partners, and are more demanding in terms of condom use, although a higher percentage did indicate that they have had unprotected sex. Females were also less likely to use alcohol, cigarettes, marijuana or fanta, but utilised pain killers to a greater degree than males. The results infer that males exhibit riskier behaviour than females as exhibited by more sexual partners, not always insisting on condom use and having had sex under the influence of drugs. However, a greater percentage of females have had unprotected sex and admit to their partners' use of drugs. This result suggests that females may be indirectly at greater risk than males, especially as it relates to drug use and risky sexual behaviour; that is, a greater percentage of females are having unprotected sex, while it is their partners that are more likely to be intoxicated rather than themselves.

Investigating the Relationships

In seeking to look at the nature, direction and magnitude of the relationships identified above, a regression analysis was undertaken utilising an index of risky behaviour as the dependent variable to indicate the level of actual practice of drug use and sexual behaviour. The independent variables related to both personal characteristics (age, gender and age of sexual initiation)¹³ and external environmental effects (type of campus and time on campus). The components of the model are outlined below.

Index of Risky Behaviour

In the development of the index, a number of variables were included to represent the current level of drug use and sexual behaviour; the riskier the behaviour the higher the index. A score of zero (0) would represent no use of drugs (legal or illegal) and no sexual activity. A very high score would represent a person and their partner frequently using drugs and engaging in risky sexual behaviour. Risky sexual behaviour is defined here as multiple sexual partners in the last month, having sex while high or drunk, and frequent unprotected sex.

The first element of the index comprises the average personal frequency of drug use ranging from zero (0) (no use) to four (4) (daily use). The intermediate values represent seldom (1), monthly (2) and weekly (3). A similar variable was constructed for respondents 'sexual partners' drug use. These two (2) variables represent the drug use element of the index. The other element of the index represents sexual behaviour and also includes two (2) variables: number of sexual partners in the last 30 days; and frequency of unprotected sex. These variables were also scored between zero (0) and four (4). The attribution of a score of one (1) to someone that has never had unprotected sex is that there would always be some element of risk involved even if the person is practicing safe sex as those answering this item were already sexually active.

¹³ Year of study could be included here as an independent variable. Due to the fact that this is highly correlated with age it was excluded from the analysis.

The third element of the index is the coincidence of drug use and risky sexual behaviour, specifically whether or not the individual has ever had sex while drunk or 'high'. A score of zero (0) is allocated if neither of these behaviours is observed and a score of four (4) for each behaviour observed. The rationale for all variables being allocated a score between zero (0) and four (4) is that such normalisation gives each component an equal weighting in the index. The index is an arithmetic sum of all six of the variables expressed as a percentage of the maximum possible score of 24. This was logged for inclusion in the final regression. An outline of the index elements and included variables is shown in the table below.

Table 15: Composition of Index of Risky Behaviour

Elements and Variables	SCORE				
	0	1	2	3	4
Drug Use Element					
1. Personal Drug Use Frequency	No use	Seldom	Monthly	Weekly	Daily
2. Partner's Drug Use Frequency	No use	Seldom	Monthly	Weekly	Daily
Sexual Behaviour Element					
3. Sexual partners in last 30 days	0 partners	1 partner	2 partners	3 partners	More than 3
4. Frequency of unprotected sex	-	Never	Occasionally	Most of the time	Always
Drug Use and Risky Sexual Behaviour Element					
5. Had sex while drunk	No	-	-	-	Yes
6. Had sex while 'high'	No	-	-	-	Yes

In reviewing the framework of the research, it is hypothesised that the level of risky behaviour exhibited by the index is related to both personal characteristics (age, gender, and age of first sexual activity) and external environmental effects (type of campus and time on campus outside of formal

instruction).¹⁴ These variables are included in the regression in the following form:

1. Personal Characteristics:
 - a. Log of Age (log_age)
 - b. Gender Dummy (Male=1) (sex_dummy)
 - c. Log of Years Under 16 of first sexual activity (log_age_sex)
2. External Environmental Effects:
 - a. Type of Campus Dummy (Closed=1) (campus_dummy)
 - b. Log of Time on Campus (log_camp_time)

The model is specified as follows:

$$RI = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + U \quad (1)$$

Where:

RI	= Risk Index
x1	= Sex
x2	= Age
x3	= Campus Type
x4	= Time on Campus
x5	= Years Under 16 of First Sexual Activity
U	= Error Term

The descriptive statistics for the variables before they were transformed are shown in the table below.

¹⁴ As noted above, some relationship between Campus Type and Age would be expected. The correlation coefficient for these two variables in the regression was 0.341, indicating that only 11.6% of their variance is in common. In addition, regression diagnostics indicate that the model is free from multicollinearity with Tolerance and Variance Inflation Factor (VIF) scores within an acceptable range of greater than 0.1 for Tolerance and less than 10 for VIF. The lowest Tolerance score was 0.87 and the highest VIF score was 1.149.

Table 16: Variable Descriptives: Pre-Transformation

Continuous Variables							
Variable	N	Mean	Std. Deviation	Skewness		Kurtosis	
				Statistic	Std. Error	Statistic	Std. Error
Risk Index	923	13.52	14.605	1.562	.080	2.764	.161
Age	875	22.58	7.368	1.883	.083	3.621	.165
Time on Campus	898	4.72	4.815	1.438	.082	1.812	.163
Years Under 16 of First Sexual Activity	929	-0.66	2.023	-5.008	.080	29.074	.160
Dichotomous Variables							
Variable	N	Category 1	%	Category 2	%		
Sex	927	Males	43.4	Females	56.6		
Type of Campus	926	Open Campus	86.8	Closed Campus	13.2		
Valid N= 836							

The results of the regression analysis are shown in the table below. The results indicate that the model is statistically significant and predicts 16.6% of the variation in the dependent variable (Risk Index) as indicated by Adjusted R²=0.166 and F=34.713 (p=0.000). All of the variables are significant at the 5% level with the exception of sex and time on campus which are only significant at the 10% level.

Table 17: Results of the Regression Analysis

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.515	.205	-	-2.509	.012
Sex	-.064	.034	-.060	-1.867**	.062
Log (Age)	1.020	.150	.230	6.824*	.000
Campus Type	-.196	.052	-.126	-3.779*	.000
Log (Time on Campus)	.073	.043	.053	1.679**	.094
Log (Years Under 16 of First Sexual Activity)	.358	.040	.291	9.072*	.000

Dependent Variable: Log of Risk Index (log_risk_index)
 Adjusted R²=0.166, F= 34.713 (p=0.000)
 * Indicates significance at the 5% level
 **Indicates significance at the 10% level

The results indicate that males have a risk index which is 6% less than females, and that Closed Campus students have a risk index which is nearly 20% less than Open Campus students. In relation to the continuous variables, time spent on campus, age and the number of years under 16 that a person had sex are all positively related to the risk index; that is, a person that spends more time on campus outside of formal instruction, is older or the lower the age they had sex under 16, the higher their risk index would be. The sizes of these effects are however varied. For a person spending 10% extra time on campus, their risk index would be 0.7% higher. For the number of years under 16 that sex was initiated, for every 10% increase in this, the risk index would increase by 3.6%. For example, a person having sex 4 years under the age of 16 (12 years of age) would have a risk index which was 7.2% lower than someone that had sex at the age of 11 (5 years under the age of 16 and 25% more than 12 years of age). The situation for age is somewhat different. As age increases, the percentage increase is matched by the percentage increase in the risk index, for example, a 20 year old would have a risk index which is 20% less than someone who is 20% older (24 years of age).

In comparing the contributions of the independent variables, the standardised beta coefficients demonstrate that the largest unique contribution (holding other values constant) comes from years under 16 of first sexual activity, followed by age and then type of campus. All of these variables are significant at the 5% level and suggest a level of support for the model proposed in Figure 1, with the exception of age. Age would have been expected to demonstrate a negative relationship to the risk index given the proposition that youth, a lack of experience and 'new found' freedoms would increase risky behaviour. However, it appears that drug use and risky sexual behaviour actually increases with age in the sample. This is an interesting issue for further research.

In terms of other contributions to the model, time on campus and sex, although significant at the 10% level, have the lowest unique contributions to the model. These results suggest that the personal characteristics of age and age of sexual initiation are more important considerations when considering the risk level of individuals than external environmental effects. Although campus type does have a significant effect on risk levels, this is outweighed by the effect of personal characteristics.

The current model does not claim to fully explain the factors that increase an individuals' risky behaviour. This is evident from an Adjusted R² of only 0.166. The model sought to investigate the proposed relationships as identified from theory and observation that personal characteristics and external environmental effects have a role to play in an individuals' risk level. Future research should seek to explore other potential variables of interest such as parental behaviour, household characteristics, religiosity, income, educational background and knowledge/perceptions of drug use/sexual practices. In addition, intergenerational sexual relationships are also thought to have a role to play where younger females may have a lower ability to negotiate safer sex (Springer, 2009); this warrants further research.

Summation

In seeking to assist in addressing the HIV/AIDS epidemic in the Caribbean, and to fill knowledge gaps related to drug use and sexual behaviour among tertiary level students in Barbados, the current paper utilised results of a sample survey of students at tertiary institutions in Barbados. The survey

managed to obtain responses from 942 tertiary level students, representing approximately 8% of the relevant population. While several of the variables received extremely low response rates, probably due to the nature of the issues being investigated, which negated any statistical analysis in some instances, the main elements of the survey received reasonable response rates that allowed the statistical analysis outlined above to be undertaken.

The main results to emerge from the survey included:

- Low level of drug use seen among respondents (less than 35%) with the exception of alcohol of all strengths which had prevalence rates between 54% and 71%
- High degree of importance¹⁵ placed on condom use to protect against HIV/AIDS, STIs, and, to a lesser degree, pregnancy
- Moderate level of sex under the influence of legal or illegal drugs (22.1%), with 15.9% indicating that they have had sex while drunk, and 10% indicating that they had sex under the influence of illegal drugs, mainly marijuana

As regards ‘campus effects’, the preliminary analysis revealed that there is some form of effect related to whether the campus was Open or Closed. While there is a marginal difference between the two campuses in the proportion of those indicating that they had sex under the influence of drugs (Open Campus: 22%; Closed Campus: 20%), Open Campus respondents were more likely to have had sex (71% versus 32%). Therefore, once sexual activity is initiated, there appears to be only a marginal difference in whether an individual will participate in sex under the influence of drugs. However, for those enrolled on a Closed Campus, this sexual initiation is less likely to occur.

Other matters of concern were also revealed from the results of the analysis of the data by sex of respondent. The results indicated that males were

¹⁵ This result relates to the importance place on condom use by respondents and not on actual behaviour where respondents indicated that they did not always insist on condom use (55.5% of those that have engaged in sexual activity) , or had never refused sex because no condom was available (48.0%). This result suggests that while respondents understood the importance of condom use, this did not always translate into practice.

participating in riskier behaviour with current sexual activity not confined to one partner and an average of 2.4 partners in the last 30 days. This was as compared to females, who on average only had 1.1 partners in the last 30 days, and for the most part their current sexual activity was confined to one (1) partner.¹⁶

Overall the results indicate that females were more likely to insist on condom use, and used less legal and illegal drugs. However, the results paradoxically revealed that they were more likely to have unprotected sex than males, as well as more likely to have a partner that used legal or illegal drugs, putting them in a position of vulnerability from risky sexual behaviour, without the related **direct** drug use. Indeed, 31.8% of female respondents had admitted that they have had sex without a condom because their partner did not want to use one.

In looking at the relationships between these issues in greater depth, the results of the regression analysis did reveal that females demonstrated higher risk levels, 6% higher than males. In addition, as regards campus effects, the results of the preliminary analysis outlined above were confirmed with the finding that Open Campus respondents had a risk index which was 20% higher than their Closed Campus colleagues. The results of the regression analysis also confirmed previous research that early initiation of sexual activity increases risk.

Although the results indicate that drug use and risky sexual behaviour is not widespread, there should be a level of concern that: engaging in sex while under the influence of legal or illegal drugs is occurring among approximately 20% of the tertiary student population; that males are demonstrating a significantly greater level of high-risk behaviour, and that females are indirectly at risk because of this. Undoubtedly action will need to be taken to sensitise as to the risks which non-condom use can present to their existence, especially as nearly one-half of respondents that had sexual intercourse admitted to only using a condom 'Sometimes'. This should also be read in light of the fact that 14% indicated that they never used a

¹⁶ It needs to be noted that these partners may or may not be in the population external to the sample.

condom during sex. While this 'risky' behaviour has not presented itself in the contraction of STIs (6%), there is an evident risk for future contractions should this behaviour continue to occur.

While social marketing campaigns can be used to modify behaviour with some success (Cismaru *et al.*, 2008), outlining the form and content is beyond the scope of the current paper. However, what is clear is that interventions will need to address the differential risk levels of males and females and increase the self-efficacy of females to reduce their indirect exposure to risk. In addition, as 'campus effects' have been identified as significant, it will be important to address the root of these effects which appear to be related to the 'freedoms' associated with an Open Campus atmosphere and the practices accepted as part of a 'subculture'. In accepting that such an environment diminishes the saliency of certain inhibiting 'cues'¹⁷ and enhances impelling 'cues'¹⁸ (Kaly *et al.*, 2002), interventions should be directed towards reinforcing these cues in the environments in which the risky behaviour is occurring. It is clear from the research that inhibiting cues are present as it relates to a wide understanding of the importance of safe sex for the avoidance of pregnancy, STIs and HIV (over 81%). However, it appears that impelling cues are somewhat more salient given that sexually active respondents were still engaging in risky behaviour with 69.1% having had unprotected sex.

¹⁷ Inhibiting 'cues' relate to the consequences of behavior such as STI contraction or pregnancy

¹⁸ Impelling 'cues' relate to the benefits of behavior such as satisfying sexual arousal, material rewards or desire to please a partner.

References

- Adelekan M., Green, A., Dasgupta N., Tallack F., Stimson G., and Wells B., (1996), 'Reliability and Validity of the Opiate Treatment Index Among a Sample of Opioid Users in the United Kingdom' *Drug and Alcohol Review*, 15 (3): 261-70.
- Broman, Clifford (2007), 'Race, Drug Use and Risky Sexual Behaviour' *College Student Journal*, December.
- October 2010**
http://findarticles.com/p/articles/mi_m0FCR/is_4_41/ai_n27484189/
- Carter, R. (2001) *Young People and HIV: KABP Survey*. Barbados: Department of Youth Affairs, Ministry of Education, Sports and Culture.
- Centers for Disease Control and Prevention (CDC) (2002), 'Sexually transmitted diseases treatment guidelines 2002' *MMWR Morbidity and Mortality Weekly Report*, 51(RR-6): 1-78.
- CICAD (Inter-American Drug Abuse Control Commission) (2007) *Drug Prevalence Survey of Secondary School Students: A Comparison report of Secondary Schools in the Caribbean*. Washington: OAS.
- Cismaru, Magdalena, Anne Lavack and Evan Markewich (2008), 'Alcohol Consumption among Young Consumers: A Review and Recommendations' *Young Consumers*, 9(24): 282-296.
- Douglas, K. (2006) *Barbados Secondary School Survey*. Barbados: National Council on Substance Abuse.
- Dryfoos, J. (1990) *Adolescent at Risk: Prevalence and Prevention*. New York: Oxford University Press.
- Hall, P., Holmqvist, M., Sherry, S. (2004), 'Risky Adolescent Sexual Behavior: A Psychological Perspective for Primary Care Clinicians' *Topics in Advanced Practice Nursing eJournal*, 4(1).
- October 2010**
<http://www.medscape.com/viewarticle/467059>
- Howard, J., Taylor, J., Ganikos, M., Holder, H., Godwin, D. and Taylor, E. (1988), 'An Overview of Prevention Research: Issues, Answers, and New Agendas' *Public Health Reports*, 103:674-683.
- Jessor, R., and Jessor, S. (1977) *Problem Behaviour and Psychosocial Development: A Longitudinal Study*. New York: Academic Press.
- Kaly, Perry, Martin Heesacker and Hanna Frost (2002). 'Collegiate Alcohol Use and High-risk Sexual Behaviour: A Literature Review' *Journal of College Student Development*, November/December.
- October 2010**
http://findarticles.com/p/articles/mi_qa3752/is_200211/ai_n9165933/?tag=content;coll

- Leigh, B., Stall, R. (1993), 'Substance Use and Risky Sexual Behaviour for Exposure to HIV: Issues in Methodology, Interpretation, and Prevention' *American Psychologist*, 48:1035-1045.
- Panzarella, P. (2010) *Final Technical Report on Substance Abuse Programmes in Barbados*. Barbados: Ministry of Health.
- Springer, Monique (2009), 'Adolescent Girls, Sexual Culture and Vulnerability to HIV', in Barbados National HIV/AIDS Commission, '2009 Research Symposium Report: New Direction in HIV Prevention and Control in Barbados,' Barbados HIV/AIDS Commission, pp. 13-14.
- Suvivuo, Pia, Kerttu Tossavainen and Osmo Kontula (2008), 'The Role of Alcohol in a Sexually Motivated Situation' *Health Education*, 108(2): 145-162.
- Zapoliski, Tamika, Melissa Cyders and Gregory Smith (2009), 'Positive Urgency Predicts Illegal Drug Use and Risky Sexual Behaviour' *Psychology of Addictive Behaviours*, 23(2):348-354.

Book Review

Who Cares? The Economics of Dignity by Marilyn Waring, Robert Carr, Anit Mukherjee and Meena Shivdas, (London, UNITED KINGDOM: Commonwealth Secretariat, 2011) 94 pages. ISBN (paperback): 9781849290197; ISBN (e-book): 9781848590687

This ground-breaking study presents insights into the hitherto hidden world of unpaid carers of persons living with HIV. In doing so, it challenges policy makers, academics and advocates to rethink priorities, approaches and interventions in the HIV response at a time when UNAIDS calls for a 'prevention revolution'.

The greater involvement of people living with HIV has generally been accepted and centred in HIV policy and planning, but those who provide care in the home remain invisible. Stigma and discrimination against the former is acknowledged, but that against their carers is unseen and beyond the boundary of State protection. This study presents a compelling case for extending HIV policy and programming to embrace the rights and dignity of HIV carers.

In global perspective, across eleven Commonwealth countries, the narratives of unpaid HIV carers – mostly women who as mothers, sisters and daughters bear a disproportionate burden, but also gay/bisexual/transgender partners, fellow prison inmates and best friends – reveal their daily struggles, challenges and coping mechanisms. Through this research, we begin to understand the daily burdens of carers – the endless round of heavy lifting, clearing up, bathing sores, finding food, and fetching wood and water, without rest or leisure; the pain of watching their loved ones physically deteriorate to 'living bones' and the inevitability of death; the misdiagnosis of illness and rejection by front-line health staff; their exposure to domestic and intimate partner violence, occasionally from those for whom they provide care and

who ‘become cruel’; the pervasiveness of stigma and discrimination; the violations of their dignity and human rights. And yet these heroes of the epidemic have ‘no choice’ but to keep on going in conditions of ‘**servitude**’, where they are unrecognised, unsung and often unsupported – as they put it, ‘there was no-one else’. As children are withdrawn from education and young adults from employment into care work, HIV plunges families, already poor, even deeper into intergenerational impoverishment and social isolation.

The authors avoid the pitfalls of yet another descriptive qualitative report, by contextualising their findings within a thoughtful and well-constructed conceptual framework that connects the voices of carers in homes and families, with macro-economics, poverty and social exclusion, with the goals and achievements of the Millennium Development Goals (MDGs) and, most importantly, with the human rights and entitlements set out in international charters and agreements, signed by governments around the world.

The theme of this study, “the economics of dignity”, merges dignity with economic costs and centers dignity alongside gender and human rights, within a ‘capability approach’ that demands attention and calls for support for the rights and capacities of persons to achieve well-being. Against this background, HIV carers, operating in conditions of severe resource constraint and ‘capability servitude’, are denied choices, freedoms, rights and dignity. Through this lens, the gender perspectives provided by the authors analyse women’s unpaid work in HIV care and, by extension, sexual and domestic violence, and economic dependency. By highlighting the conditions of care, the analysis deepens our understanding of the structural vulnerabilities of women and girls, and strengthens the demand for a systemic engagement of gender inequality in strategic planning around HIV.

Implications for more responsive, gender-sensitive HIV policy and programming are clearly articulated in this study. In the area of Treatment, Care and Support, the HIV response has privileged treatment, with much less focus and funding on care and support, and even less on family care. State commitment to a duty of care is evident, though still wanting, in hospitals, clinics and prisons, but rarely if at all in households and families where care is unpaid and not defined as ‘work’ and where, perhaps, the assumption that the family is a private domain and should be left to do what it does best

persists as an excuse. As the authors point out, without State responsibility and accountability, HIV carers are excluded from social policy. Yet, it is on their shoulders that the real burden of HIV falls.

The book is timely in the context of threatened reductions in global funding for HIV, economic recession and cuts in public expenditure, a persistent reluctance of national governments to fund HIV prevention beyond treatment, and suggestions of ‘AIDS-fatigue’ in social policy. In the absence of State social protection and support, the combined effects threaten to push the capacity of carers beyond breaking point. As the authors clearly articulate, HIV carers operate within a lean-State system that marginalises them, takes them for granted and yet, depends heavily on them.

The authors extend the analysis beyond any considerations of what might be seen as welfare, with a strong and convincing argument for social protection for carers as a strategy for the HIV prevention revolution and for the achievement of MDGs. Their research dispels any lingering doubts over the critical role of care and support, especially that provided by home-based carers, in reducing HIV transmission. Clearly, national HIV response programmes must extend governance responsibilities by respecting the “economics of dignity” with social protection for HIV carers and their vulnerable families.

Like all good research in the area of HIV and social policy, this book holds much promise as a catalyst for change. First and foremost, it reveals the daily contributions and struggles of HIV carers and raises awareness around how different their lives would be with simple interventions in basic needs of food, water and essential drugs, with protection from stigma and violence, with official and informal support to share the care and relieve the burden, with respect for their rights and dignity.

The book paves the way for country-, culture- and community-specific situational analyses to identify targeted interventions to relieve the plight of carers, to transform them from an invisible, reserve army of unpaid labour and empower them as key partners in national HIV response programmes. It calls for cross-country analyses of diversity in, for example, gendered patterns of care and family support, the cultural forms and intensity of stigma against carers, and the impact of different types of social protection, so that context-specific interventions to support carers might be shaped to make a real difference.

The central argument in this study might also be further strengthened with complementary, country-based research with persons living with HIV on the critical difference that unstinting family care, support and protection makes towards their daily lives and survival; or, alternatively, how its absence contributes to non-compliance with treatment, stigma and violence, persistent risk sexual behaviours, HIV infection and AIDS related mortality.

While respecting the decision of the authors to shift from a specifically economic to a rights-based analysis around the theme the “economics of dignity”, it is a truism that governments respond to proposals framed in cost/benefit terms supported by quantitative data, with measurable indicators, goals and targets. Again country-specific studies that complement the qualitative analysis by calculating the contribution of unpaid carers at family and household levels are critical. The examples of Botswana and New South Wales outlined in the book provide valuable guidelines to shaping social protection policy.

For the women and men who already care for persons living with HIV, this book brings inspiration and hope that their daily struggles will be recognised and eased by more responsive HIV policy, that their work is acknowledged as crucial to HIV prevention and that they will be repositioned from invisible to central in the HIV response. For policy-makers, this research is an eye-opener to the realities, the ‘servitude’ and the breaches of human rights and dignity among those who care for persons living with HIV and the pressing need for social protection.

The book is also a tribute to the care, the commitment and the compassion of Robert Carr, one of the authors, who championed the human rights and dignity of vulnerable groups in the context of HIV in all his work. The authors must be congratulated on their innovative approach and analysis. Let their message for the support and empowerment of HIV carers not fall on deaf ears.

Christine Barrow

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