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At Risk?

**Exploring the relationship between HIV/AIDS-related knowledge and risky
sexual behavior in Jamaica**

Health & Medical Geography Specialty Group Student Paper Competition

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*At Risk?***Exploring the relationship between HIV/AIDS-related knowledge and risky sexual behavior in Jamaica**

ABSTRACT: Using the 2004 Knowledge, Attitudes, Behaviour and Practices (KABP) national survey, this research investigates factors contributing to HIV/AIDS-related risky sexual behavior in Jamaica, using the theoretical underpinnings behind the concept of “risk” to elucidate the relative vulnerability of different demographic groups. In particular, how is risk defined and by whom, and how does this shape the risk environment for HIV/AIDS. The social construction of “risk” is explored as an act of translation of science, whose formalized and institutionalized meanings do not always match up to the individual’s perception of personal risk to HIV/AIDS. The disjunction between knowledge and actual behavioral practices should be addressed in HIV/AIDS policy and related education and youth prevention programs.

HIV/AIDS IN JAMAICA

“...to describe the HIV epidemic in any given country, surveillance systems should collect information from different sources, different vulnerable groups, different age groups and different geographic areas to satisfy needs for planning and selection of prevention and control strategies to be implemented at the national level.”

Caribbean Epidemiology Centre 2002

The Caribbean region is experiencing the highest rate of HIV/AIDS in the Western Hemisphere, second only to sub-Saharan Africa. In Jamaica, the third largest island in the Caribbean, an estimated 1.5% of the adult population was living with HIV/AIDS in 2004. The number of HIV cases is predicted to increase significantly over the next decade due to the effects of globalization, regional and cultural integration, increased mobility, changing sociocultural and sexual behavioral patterns, drug use and sustained underlying, but powerful, religious and cultural taboos (Inciardi, Syversten & Surratt 2005). It is important to note that this increase shows spatial variation, with the most urbanized parishes, Kingston & St. Andrew (KSA Metropolitan Area) and St. James, experiencing the highest incidence of the disease: 595.5 cases and 830.0 cases per 100,000 population respectively in 2005. Commercial sex tourism is cited as the largest factor driving the epidemic in St. James.

There are also gendered differences in HIV/AIDS rates. Although men have traditionally had higher rates of HIV/AIDS in Jamaica, that gap is now rapidly closing as women are increasingly affected, with the adult male to female ratio of HIV cases declining from 2.6 to 1 in 1988 to 1.3 to 1 in 2000. Girls and young women, 15 to 25 years, are currently at particular risk of acquiring HIV infection. Furthermore, between 1982 and 2006, eighty percent of all reported risk behaviors was multiple sexual partners/contacts (Jamaica HIV/AIDS Epidemic Update, January to December 2006).

Using the 2004 National Knowledge, Attitudes, Behaviour & Practices (KABP) survey, the main objective of this study is to examine the relationship between knowledge about HIV/AIDS and sexual behavioral practices. It is often asserted that increased knowledge about HIV/AIDS and ways to protect oneself will result in safer sexual practices; after all, this is the premise upon which educational and media campaigns are based. Such campaigns aim to change people's behavior regarding sexual practices, condom use, number of partners, getting tested and knowing one's status, and endorsement of common myths and misconceptions by providing people with information that is considered to be critical to making wise choices. This study investigates whether having that information inevitably leads to "wise choices."

A secondary objective is to explore the role of personal risk perception as a factor influencing a person's sexual behavioral practices. This is based on the premise that a person who regards him or herself as having little chance of getting infected with HIV may be more willing to practice risky sexual behavior. Conversely, it could also be contended that a person who regards him or herself as having a high chance of getting infected is someone who is already practicing high-risk behaviors. Both hypotheses are explored here.

Jamaica serves as an excellent case study for a number of reasons. First, Jamaica is experiencing a generalized HIV/AIDS epidemic, with a sero-prevalence rate of 1.5% (2006) out of a population of 1.4 million adults¹. This is approximately 25,000 adults living with HIV, 5,000 persons with advanced HIV and an estimated 15,000 individuals unaware of their status (Figueroa 2007). A generalized epidemic allows us to make inferences about the whole population, and not focus on certain high-risk groups such as men who have sex with men, intravenous drug users and those involved in transactional sex. Second, in the age-sex

¹ Total population of Jamaica in 2006 is 2.6 million.

breakdown, young females, 15 to 24 years, are considered at a higher risk to HIV infection than their male counterparts. In fact, the preliminary findings of the 2008 KABP reported that “girls 15 to 19 years are at three times higher risk of infection than males in the same age group” (Jamaica Observer 2008). Dr. Campbell Forrester, chief medical officer at the Jamaican Ministry of Health, cites sexual practices, in particular the pattern of non-regular sex partners as a contributing factor (Jamaica Observer 2008). Combined with the fact that AIDS was the second leading cause of death for 15 to 24 year olds (KABP 2004), this highlights the urgency to unravel how and why youths, and especially females, are at such a high risk.

Third, the Jamaican National HIV/STI Control Programme adopts a holistic framework in its national multi-sectoral response, targeting three main areas: Prevention (behavior change), Treatment, and Stigma & Discrimination (Harvey 2008). Youth/adolescent interventions, which fall under ‘Prevention,’ mobilize young people in and out of school in their strategic response efforts. From school interventions and peer strategy to summer youth camps and party interventions, the national response has provided opportunities for increased involvement of youth (Jamaica National HIVSTI Programme 2006). Yet, challenges remain. While knowledge and awareness of HIV/AIDS have increased, possibly in response to such prevention strategies, risky sexual behavioral practices have also increased, particularly in youths. This research provides a first look into examining these disparities from a geographic perspective, exploring the themes of risk and social vulnerability (Craddock 2000).

The intent is not to explain the complexities behind (sexual) behavior, but rather to investigate whether a significant causal relationship exists between knowledge and behavior. This has enormous implications for the national HIV/AIDS response policy in Jamaica, regarding how to measure the success of education/prevention strategies especially when

expected changes in behavior do not follow. Furthermore, a disparity in this relationship may contribute to the added risk of young people, especially young women and girls, to HIV infection since it may indicate that the root problems lie not in lack of knowledge and education but in harder to address societal issues and the risk environment within which youth operate.

The Risk Environment

“Neither science, nor the politics in power, nor the mass media, nor business, nor the law nor even the military are in a position to define or control risks rationally.”

Ulrich Beck

“While considerations of risk have always been intrinsic to the ways in which individuals and institutions have oriented themselves to their environments, what is qualitatively different about today is how much more explicitly conscious those individuals and institutions are about the risks they confront.”

Dannreuther & Lekhi

We are obsessed with risk. Not only are we increasingly risk conscious, as Dannreuther & Lekhi (2000) describe, but we exist within what can be known as a risk society (Beck 1992). Beck defines this risk society as “a systematic solution for managing the risks and insecurities introduced by modernisation, which has altered the dynamics of social organisation during this process” (CIDOB 2006). According to Beck (2006), risk then represents the anticipation of some catastrophe, a perception often ignoring the very preconditions that generated it; HIV/AIDS is one such modern catastrophe. In order to make sense of the social disorder that has resulted from this emerging epidemic, we have resorted to the use of categorizations and the identification of what puts an individual at risk to HIV/AIDS. This tendency is epitomized by the notion of the 4-H club, which identifies risk groups for HIV/AIDS: homosexuals, hemophiliacs, heroin users, and Haitians (eventually prostitutes were added to the list).

There has been what Craddock (2000) calls a “strange silence” in the geographic literature on AIDS looking at risk and its geographic dimensions (153). With the onset of the AIDS epidemic

in the 1980s, geographers failed to address questions of risk and the social context within which the virus is transmitted and the ways in which certain groups of individuals become vulnerable (Craddock 2000). Geographers have also failed to address the questions of who and why in the risk equation of HIV/AIDS (Craddock, 2000, 153). With a few exceptions (Asthana & Oostvogels 1996; Murray & Robinson 1996; Wilton 1996; Asthana 1997; Brown 1995, 1997), geographers have tended to focus more on “the production of spatial accounts which map the spread of AIDS through time and space” so that the literature falls under “two related dimensions of HIV/AIDS: distribution and diffusion” (Brown 2000, 1271).

The social model of health: a new focus in medical geography

Within the last decade, there has been a distinct paradigm shift in the prevailing discourse of public health, and more specifically of global AIDS policy and politics related to the definition and measurement of risk. The dominant discourse within public health, and more specifically global HIV/AIDS policy, has been based on a reductionist approach to disease. Brown (2000) posits that “biomedicine played a central role in the construction of groups as being ‘at risk’; that is, individuals were reduced to specific causal behaviours and then regrouped according to the belief that such behaviours were common to all” (1274). This model draws upon the contagion theory of disease (which evolved into germ theory) that contends that the cause of disease is some infective agent, or germ, which passes from an infected individual to an uninfected, often unsuspecting, individual (Chan & Reidpath 2003). This causal link between disease agents, risky behavior and lifestyle has shifted the responsibility of disease control and prevention to the individual; individuals being the host of the disease and source of further infection, the ones who “make up the groups...associated with the routes of disease transmission (also termed high risk groups)” (Chan & Reidpath 2003, 40).

Disease has transformed “from an ever-present danger into a risk that is related to lifestyle”; furthermore, it is assumed that “increased knowledge about the causal links would enable individuals to make rational decisions and avoid risks” (Ahlberg, Jylkas & Krantz 2001, 32). HIV/AIDS prevention and health promotion models have been based on this assumption that individuals could be persuaded to change their behaviors so that they would ultimately reduce the risk of HIV infection, thus their emphasis on health education and the ABC model of Abstinence, Be Faithful and Condom Use (Turner et al. 1989; Parker 2001).

The assumption being made is that informed individuals will make rational decisions that will protect themselves and others from disease transmission, and through this delimiting process on their field of possibilities, people act as moral citizens. Increasingly, scholars have shown that the links between knowledge and behavior and lifestyle are much more complex and that decision-making is often not based solely on rationality. In such models, individuals are regarded as being independent of the social contexts in which they operate; in other words, they are rational actors or subjects. These models of health education have failed repeatedly, highlighting the disjunction between knowledge of HIV-related risks and actual risk-taking behavior.

Parker (2001) highlights the difficulties of translating such models or protocols across different social and cultural settings, which are often associated with “different understandings of sexual expression and practices” (165). However, alternative perspectives have emerged, which theorize that risk is instead a social and cultural construction; that the social context within which the individual operates in conjunction with governing institutions contributes to the actual risk to exposure and contagion. As anthropologist Richard Parker (2001, 165) summarizes, “a far more complex set of social, structural, and cultural factors mediate the structure of risk in every population group, and...the dynamics of individual psychology cannot be expected to fully

explain, let alone produce, changes in sexual conduct without taking these broader issues into account.”

But first, let us take a step back and define risk?

Risk defined

Risk in its most basic sense is the likelihood of being exposed to a source of danger or a hazard. It is a subject often framed within disaster and hazard studies, and within this framework, AIDS is considered a biological hazard. Jane Franklin, in the *Politics of Risk Society*, notes that “[t]here has always been a contingent edge to life,” and we use the term “risk” to talk about this contingency (Franklin 1998, 1). Dannreuther & Lekhi (2000) define risk as a “conceptual mechanism through which to determine the possible and/or likely outcomes of our actions in the face of the structural uncertainties thrown up by the social and natural world” (575). To put this in other words, “risk helps to mediate between the known and unknown by helping [us] to construct a social context within which our actions have a definite range of definable outcomes” (Dannreuther & Lekhi 2000, 575). Social context is a very important factor to appreciate; it is defined as the “interplay of social, cultural, historical, political, and economic factors which may influence [sexual] practice” (Karlyn 2005, 280). Therefore, an understanding of social context is necessary to give meaning to sexual, or in general risky behavior and practices (Parker 1994; cited in Karlyn 2005).

Because our perception of risk depends on what we know and don’t know, based largely on our experiences, the study of risk can be regarded as “both a powerful and a contested concept” all at once (Dannreuther & Lekhi, 2000). This “risk consciousness” can be translated perfectly within the context of HIV/AIDS. From risk groups to risk factors and high-risk behavior, the prevailing paradigm seems stuck on what puts an individual at risk and ways in which we can

protect ourselves from these risks. Risk can thus be regarded as having “a direct and tangible impact on the actions of the individual actors; on the calculations made by public and private institutions [namely, public health]; on processes of policy formulation; on conceptions of governance and regulation... and on the articulation of political ideologies” (Dannreuther & Lekhi 2000, 576).

This demonstrates clearly that risk can be discussed in many varied social contexts; therefore, the question emerges: how does the way risk is framed influence our actions? (Dannreuther & Lekhi 2000).

DATA AND METHODS

Data

The National Knowledge, Attitudes, Behaviour and Practices (KABP) Surveys are conducted every three to four years in Jamaica with the goal of measuring demographic trends and spatial patterns in people’s knowledge, attitudes and actual behavioral practices related to HIV/AIDS. The last KABP report, on which this research is based, was published in 2004. The KABP surveys provide “national level measures of outcome indicators” with an emphasis on observing trends in the following areas: “partner reduction, consistent use of condoms in regular and non-regular partnerships, delay of sexual activity among young persons, myths and appropriate practices regarding STI/HIV/AIDS, knowledge and awareness of STI, and condom accessibility” (Ministry of Health Jamaica 2007).

As a behavioral survey in the general population, the 2004 KABP was collected through a series of cross-sectional surveys of individuals in randomly selected samples, defined by Enumeration Districts (EDs). First, the EDs were grouped such that no ED contained fewer than 80 dwellings. Next, all EDs were grouped into 234 strata of equal size (measured by the number

of dwellings). These became the sampling regions. Each stratum comprised about 25,000 dwellings and the EDs were selected from each region with probability proportionate to their size (Ministry of Health Jamaica 2007).

Data was collected in confidential face-to-face interviews by trained interviewers. The design of the KABP is known as “paired selection design,” and involves the maximum use of stratification whilst allowing for the calculation of variance (Lee & Forthofer 2005). The target groups were males and females 15 to 24 years and 25 to 49 years. Gender was controlled for such that the male to female ratio was 1 to 1, and the rural/urban composition of the sample was representative of the country (Ministry of Health Jamaica 2007).

Behavioral surveys like the 2004 KABP can provide an indication of the extent of risk behavior in the population and of the “links” between the national population and specific groups with known high(er) risk behavioral trends (Pisani et al., 1998). According to a joint report by Impact, UNAIDS and Family Health International (1998), the questions answered by such surveys are: “What puts people in the general population at risk of HIV infection? Has risk behaviour changed over time? Which behaviours have not changed?” (28).

Statistical Analysis

First, an exploratory analysis of the 2004 KABP data set ($n = 1800$) was carried out, followed by a series of confirmatory tests using SPSS v. 17. Table 1 provides an overview of the characteristics of the sample and the main variables studied. The sample was grouped by age, 15–24 years and 25–49 years, as well as by sex.

In order to explore the disjunction between knowledge and behavior, a Knowledge Index was created. This Knowledge Index serves as a proxy for an individual’s level of knowledge about HIV/AIDS and includes the variables: awareness of HIV, awareness of AIDS, knowledge that a

healthy-looking person can be infected, knowledge of ways to prevent HIV transmission, and rejection of all major misconceptions about HIV transmission. The prevention methods that were considered as effective were condom use, abstinence, and having one uninfected, faithful partner, This follows the Jamaican Ministry of Health’s definition of those with effective knowledge of ways to prevent HIV transmission as, “the percent of all respondents who, in response to prompted questions, say that a person can reduce their risk of contracting HVI by using condoms or having sex only with one faithful, uninfected” (2004 KABP, 25).

Table 1. Distribution of individual characteristics from the 2004 KABP Survey in Jamaica

Characteristic	Sample (n = 1800)	Male (n = 878)	Female (n = 922)
Age, years, %			
15-24	50	51.6	48.5
25-49	50	48.4	51.5
Education level, %			
No formal schooling	0.3	0.3	0.22
Primary	2.4	2.96	1.84
All Age/Secondary or higher ^a	97.0	96.6	97.4
Relationship status, %			
Single	34.4	29.5	39.0
Occasional partner	25.4	32.8	18.3
Regular, non-cohabiting partner	9.0	9.3	8.7
Married/Living with a partner	31.2	28.4	33.8
No Answer	0.1	0.0	0.2
Ever had sex, %			
Yes: vaginal	85.7	89.3	82.3
Yes: anal	0.1	0.1	0.0
Yes: both	0.8	0.7	0.9
No to both	13.4	9.9	16.8
Employed			
Full time	34.8	43.4	26.6
Part-time	11.2	14.6	7.9
Unemployed	31.3	21.2	40.9
Student	22.8	20.8	24.6
Median age at first sex, years		14	17
15-24	15	14	16
25-49	16	15	17
Mean number of partners			
In past 4 weeks	1.24	1.50	0.97
In past 12 months	2.11	3.00	1.16
Engaged in commercial sex, %	2.9	5.1	0.9
Knowledge about AIDS, mean score ^b	6.12	6.09	6.15
15-24 years	6.05	6.00	6.09 ₅
25-49 years	6.18 ₆	6.17 ₅	6.19 ₅

^a This includes tertiary, skills training, evening classes, community college and nursing school

^b Index ranges from 0 to 7 and includes awareness of HIV, awareness of AIDS, knowledge that a healthy-looking person can be HIV positive, knowledge of methods of prevention (condom use, abstinence and having one uninfected, faithful partner), and rejection of all major misconceptions about HIV transmission.

Chi-square tests were performed to determine the significance of relationships between variables of interest. Key variables included: “Knowledge Index”, “Chances of getting infected” (as a measure of personal risk perception), and “Myths endorsement”. These dependent factors were correlated with socio-demographic factors including age, sex, education level and being employed, as well as health factors such as “Things done to protect self” [from HIV infection], “Ever been tested?” and “Knowledge of ways to protect self”. A significance level at 95% was assumed for the analysis where results returning a $p < 0.05$ allowed us to reject the null hypothesis. For most tests, both age and sex were controlled for.

RESULTS

Results can be divided into three main categories: knowledge of AIDS, myths and misconceptions, and risk perception (see Table 2 below). Chi-square tests revealed a significant relationship between a person’s level of knowledge (as defined by the Knowledge Index) and their age and, to a lesser degree, their education level (the exception being young females, 15-24 years). Sex, surprisingly was not significantly associated with the knowledge of AIDS, indicating no difference in knowledge levels between males and females. Also, being employed was not significantly associated with the Knowledge Index. It was hypothesized that being employed would be a reflection, albeit poor one, of a person’s socio-economic status so that employed persons would be more knowledgeable. However, this relationship did not account for differences in employment.

The Knowledge Index was also cross-tabulated with the variable, “Things done to protect self”. This latter variable was used as an indication of the measures a person practices to prevent HIV infection, and included whether or not he/she used condoms (consistently), had one partner and/or practiced abstinence. An initial significant relationship was found, with a $p\text{-value} = 0.033$.

However, further testing in which age and sex were controlled for, showed a weaker relationship such that only older females, 25 to 49 years were most likely to endorse safer sexual practices as their knowledge of AIDS increased.

Relationships between myths endorsement and education levels revealed that persons with at least an all age or secondary high school education were less likely to endorse common myths about HIV transmission. The myths consisted of whether or not they believed if a person could be infected if he/she shared food or if he/she touched someone with HIV/AIDS (PLWHA) or if a mosquito bite could transmit the virus. It was also found that males continued to be more likely than females to endorse myths (as compared to KABP 2000 findings). Results showed that 17% of males endorsed to mosquito bites (versus 12% of females, $p=.002$), 20% males endorsed not sharing food with a PLWHA (versus 14% females, $p=.0002$), and 11.4% males for not touching a PLWHA (versus 6.5% females, $p=.0008$).

Finally, the tests for associations between personal risk perception (as defined by “Chances of getting infected”) and other factors showed varied results. The correlates included the Knowledge Index, things done to protect self, ever been tested, age of first sex, and having ever paid for or been paid for commercial sex. Significant associations were found such that persons who are more knowledgeable about ways to prevent HIV transmission were more likely to consider themselves at a lower risk. In addition, persons who practice consistent condom use, have one faithful, uninfected partner or abstinence were more likely to judge themselves as having a lower risk of catching HIV. Finally, persons who were tested (and assumed to be aware of their status) were also more likely to consider themselves at a lower risk

Table 2. Results of Categorical Tests regarding Knowledge and Behavior from 2004 KABP in Jamaica

Variables cross-tabulated	Calculated chi-square value	p-value (significant at 95% level)
KNOWLEDGE OF AIDS		
Knowledge Index * Sex	4.921	.426 (No)
Knowledge Index * Age	14.720	.012 (Yes)
Knowledge Index * Education Level (Control: Age & Sex)	Male 15-24: 117.163 25-49: 146.897 Female 15-24: 3.277 25-49: 475.419	Yes, except for females 15-24yrs
Knowledge Index * Employed	8.107	.919 ^a
Knowledge Index * Things done to protect self	26.540	.033 (Yes)
Knowledge Index * Things done to protect self (Control: Sex)	Male: 10.330 Female: 36.224	Male: .798 (No) Female: .000 (Yes)
Knowledge Index * Things done to protect self (Control: Age)	15-24: 14.551 25-49: 24.654	15-24: .484 (No) 25-49: .006 (Yes)
Knowledge Index * Things done to protect self (Control: Sex & Age)	Male 15-24: 9.835 25-49: 6.679 Female 15-24: 15.445 25-49: 31.233	Male 15-24: .830 (No) 25-49: .572 (No) Female 15-24: .051 (No) 25-49: .001 (Yes)
MYTHS & MISCONCEPTIONS		
Myths endorsement * Sex	16.463	.001 (Yes)
Myths endorsement * Education Level	18.661	.028 (Yes)
Myths endorsement* Knowledge of ways to protect self (Control: Sex & Age)	Male 15-24: 30.095 25-49: 34.176 Female 15-24: 27.522 25-49: 42.341	.000 (Yes; females, 15-24 at .001)
RISK PERCEPTION		
Chances of catching HIV * Age * Sex	Male, 30.037 Female, 23.553	.000 (Yes) .001 (Yes)
Chances of catching HIV * Education Level (Control: Age & Sex)	Male 15-24: 31.5 25-49: 46.67 Female 15-24: 73.83 25-49: 59.481	Male 15-24: .293 (No) 25-49: .027 (Yes) Female 15-24: .004 (Yes) 25-49: .124 (No)
Chances of catching HIV * Age of first sex	156.868	.334 (No)
Chances of catching HIV * Knowledge Index	58.471	.001 (Yes) ^b
Chances of catching HIV* Things done to protect self	209.422	.000 (Yes) ^b
Chances of catching HIV * Commercial Sex (both those who have been paid or who have paid others)	5.050	.410 (No)
Chances of catching HIV * Ever been tested	139.933	.000 (Yes) ^b

^a Results still not significant when age and sex are controlled for

^b Results are still significant when age and sex are controlled for

DISCUSSION

There is an almost universal awareness of HIV/AIDS in the Jamaican population, with only 3 females having reported that they had not heard of AIDS, one of whom had not heard of HIV (2004 KABP). Knowledge has undeniably increased, knowledge of methods of prevention,

proper dispelling of myths and knowledge of HIV testing sites. This may be a product of increased access to HIV/AIDS-related information, the media, better education in schools, promotion of safe sex methods, in particular condom use, and the distribution of educational materials (pamphlets and posters) around schools, clinics, and other public spaces. Even one of the main national newspapers, the *Jamaican Gleaner*, has been used as a vehicle for education. Overall, the Jamaican National HIV/STI Control Programme has strengthened their response strategy through collaboration with other ministries, the private sector and even the entertainment sector. However, the situation on ground appears in contrast. Youth continue to practice risky sexual behavior, from inconsistent condom use (if at all) to multiple partnerships and engagement in transactional sex.

Statistical analysis reveals that older females, 25-49 years are the most likely to practice things to protect themselves from infection. Of the other cohorts, there appears to be no significant relationship between increased knowledge of AIDS and safer behavioral practices. Therefore, the question becomes why don't people change their behavior? Donovan & Ross (2000) contend that we live in "collectivistic rather than individualistic societies and thus the emphasis on and opportunity for individual agency is reduced" (1900). What they call "risk situations", Rhodes et al. (2005) refers to as the "risk environment" and both concepts highlight a framework to study the "social, structural, and affective components of the occasion of risk" (Donovan & Ross 2000, 1900). Rhodes et al. (2005) build off the concept of structural violence (Farmer 1992). Risk exposure can be understood as a combination of risk perception and risk assessment, both of which are placed within a wider risk environment. The risk environment is described as "the space (social and physical) in which a variety of factors exogenous to the individual intersect to increase vulnerability to HIV" (220).

The study also points to the fact that behavior, in and of itself, is complex and cannot be explained by socio-demographic factors and one-dimensional, apolitical health indicators like condom use and number of partners. It attests to the fact that *knowing* and *doing* are very much two different things. Therefore, the observed trends of increasing risky sexual practices in youth may not be an indication of ineffective education campaigns. Instead, the increased awareness shows that they are working, but behavior is too complex and more resistant to change. What emerges is the need to address the ultimate factors driving risky behavior, including gender and power differentials, cultural and societal factors. Vulnerability to HIV/AIDS is a product of individual behavior and practices and, to a larger extent, the underlying socio-cultural and political factors that are driving the epidemic in Jamaica. Previous studies (Inciardi, Syversten & Surratt 2005 which focused on the Caribbean, Mann et al., 1992) suggest that risk factors include lack of relevant information and access to HIV/AIDS-related services, widespread myths and misconceptions about AIDS, lack of youth-centered and/or gender-focused services, religious taboos, homophobia, patriarchal society and related female subservience, as well as stigma and discrimination towards people living with HIV/AIDS.

The second objective of the study was to examine if behavior also correlated with personal risk perception. The findings indicate that there is a significant association such that persons who considered themselves at no chance of getting infected were more likely to practice risky behavior. This relationship has not been fully developed and is in need of further research. However, Donovan & Ross (2000) explain that inaccurate risk perception is the most immediate barrier to safer sex. Weinstein's (1985) "downhill phenomenon" refers to "people always compar[ing] their own risk with someone who is at much greater risk than themselves" (Donovan & Ross 2000, 1900). This leads to the individual's misguided perception of their risk

to some hazard (in this case, HIV infection). Donovan & Ross (2000) note that altering risk perceptions alone is not enough; “cultural and normative structures around safer sex” should also be modified (1900). And not only around such structural elements, but also an examination of individual or personalized risk factors: what does an individual consider as a risk factor to HIV?

Limitations

The study was largely defined by formalized and institutionalized risk factors. According to the World Health Organization’s classification of risk factors for HIV, they are men who have sex with men, multiple sexual partners, inconsistent use of condoms, commercial or transactional sex, and the use of unsterilized needles. Such a classification provides a brief description of the main modes of HIV transmission, but fails to locate these modes within a specific social context and relate them to processes that may mean that a specific act may be high risk in one environment but not necessarily in another. The use of such risk factors should not take away from the complexities inherent to the dynamic interplay between risk behavior and risk environment, from the way in which both endogenous and exogenous forces transform the landscape into what it is today, and of how within the social context, the question is not necessarily of certain sexual behaviors being risky, but of all sexual behavior being risky because the environment itself is one of high risk (Barnett & Blaikie 1992, 69).

REFERENCES

- Ahlberg, B. M., Jylkas, E., & Krantz, I. (2001). Gendered construction of sexual risks: Implications for safer sex among young people in Kenya and Sweden. *Reproductive Health Matters*, 9(17): 26.
- Barnett, T. & Blaikie, P. (1992). *AIDS in Africa: Its present and future impact*. New York: Guilford Press.
- Beck, U. (1992) *Risk Society: Towards a New Modernity*. London: Sage
- Brown, T. (2000) AIDS and social governance. *Social Science & Medicine* 50:1273.
- Brown, T. & Duncan, C. (2002) Placing geographies of public health. *Area* 33(4): 361.
- Brummelhuis, H. & Herdt, G. (1995). *Culture and sexual risk: Anthropological perspectives on AIDS*. Amsterdam: Gordon and Breach Publishers.
- Chan, K. & Reidpath, D. (2003). "Typhoid Mary" and "HIV Jane": Responsibility, agency and disease prevention. *Reproductive Health Matters*, 11(22): 40.
- Craddock, S. (2000). Disease, social identity, and risk: Rethinking the geography of AIDS. *Transactions - Institute of British Geographers* (1965), 25(2): 153.
- Dannreuther, C. & Lekhi, R. (2000). Globalization and the political economy of risk. *Review of International Political Economy*, 7(4): 574.
- Donovan, B. & Ross, M. W. (2000). Preventing HIV: Determinants of sexual behaviour. *Lancet*, 355(9218): 1897.
- Farmer, P. (1992). *AIDS and accusation: Haiti and the geography of blame*. University of California Press, Berkeley.
- HIV AIDS in the Caribbean: Big problems among small islands.(2001). *JAMA*, 285: 2961.
- Hope Enterprises Ltd. (2004). "Report of National Knowledge, Attitudes, Behaviour & Practices (KABP) survey year 2004". Prepared for Ministry of Health, Jamaica.
- "Jamaica UNGASS Report: Declaration of commitment on HIV/AIDS", January 2003 – December 2005, Ministry of Health, Jamaica.
- "Jamaica National HIV/AIDS Monitoring and Evaluation System: Monitoring & Evaluation Plan Document A" (June 2007). National HIV/STD Control Programme, Ministry of Health, Jamaica.
- "Jamaica HIV/AIDS/STI National Strategic Plan 2002-2006". (January 2002). Ministry of Health, Jamaica.
- Kalichman, S. C., Simbayi, L. C., Kagee, A., Toefy, Y., Jooste, S., Cain, D., et al.. (2006). Associations of poverty, substance use, and HIV transmission risk behaviors in three South African communities. *Social Science & Medicine*, 62(7): 1641-1649.
- Kalipeni, E., Craddock, S., Oppong, J., & Ghosh, J. (editors). (2004). *HIV/AIDS in Africa: Beyond epidemiology*. Oxford: Blackwell Publishing.

- Karlyn, A. (2005). Intimacy revealed: Sexual experimentation and the construction of risk among young people in Mozambique. *Culture, Health Sexuality*, 7(3): 279.
- Lee, E. S. & Forthofer, R. N. (2005). *Analyzing Complex Survey Data*. Second edition, Sage Publications, Ltd., California.
- Lewis, T. (28 November 2008). "AIDS worry: Increasing number of infections in age group 10 to 24". *The Jamaica Observer*.
- Mann, J., Tarantola, D. J. M., Netter, T. W. (eds). (1992). *AIDS in the world*. Cambridge: Harvard.
- Parker, R. (2001). Sexuality, culture, and power in HIV/AIDS research. *Annual Review of Anthropology*, 30: 163.
- Parker, R. G. (2007). Sexuality, health, and human rights American Public Health Association.
- Pisani, E., Brown, T., Saidel, T., Rehle, T., & Caraël, M. (1998). "Meeting the behavioral data collection needs of national HIV/AIDS and STD programmes." A joint Impact/FHI/UNAIDS workshop: Report and conclusions.
- Rhodes, T. & Simic, M. (2005). Transition and the HIV risk environment. *BMJ.Com*, 331(7510): 220.
- Rhodes, T., Singer, M., Bourgois, P., Friedman, S. & Strathdee, S. (2005). The social structural production of HIV risk among injecting drug users. *Social Science & Medicine* 61: 1026.
- Schiller, N., Crystal, S. & Lewellen, D. (1994). Risky business: The cultural construction of AIDS risk groups. *Social Science and Medicine*, 38(10): 1337.
- Stephenson, R. (2009). "Community influences on young people's sexual behavior in 3 African countries". *American Journal of Public Health* 99, 1: 102.
- Warren, C. (1999). Geographical variations in AIDS knowledge and attitude among adolescent girls of Jamaica. *AIDS Education and Prevention*, 11(4): 364.
- Weinstein, N. "Perceptions of personal susceptibility to harm" In: Mays, V. M., Albee, G. W. & Schneider, S. F. (eds). (1989). *Primary prevention of AIDS: psychological approaches*. Newbury Park, CA: Sage, 142-67.
- World Bank. (2001). HIV/AIDS in the Caribbean: Issues and options. A World Bank Country Study, Washington D.C.: World Bank.