Knowledge, attitude and practices of adults of the reproductive years on reproductive health matters, with emphasis on HIV infected people in a Caribbean society

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Citation: Bourne PA, South-Bourne N, Francis CG. Knowledge, attitude and practices of adults of the reproductive years on reproductive health matters, with emphasis on HIV infected people in a Caribbean society. North Am J Med Sci 2010; 2: 381-388.
Doi: 10.4297/najms.2010.2381
Availability: www.najms.org
ISSN: 1947 – 2714

Abstract

Background: South and Southeast Asia represent the largest number of new HIV infections, while Sub-Saharan Africa represents the highest rate of new infections, followed by Latin America and the Caribbean. Yet no study that has emerged in the Caribbean has comprehensively examined young people’s sexual and reproductive health attitudes, knowledge and practices, comparing the result with those who are HIV infected. Aim: The present study examines core issues of sexual and reproductive health among youths, particularly with respect to HIV. Material and Methods: The sample was 1,800 respondents ages 15-49 years. Multivariate logistic regressions were fitted using one outcome measure: self-reported confirmed positive HIV test results. Results: Almost 34% of the sample had been tested for HIV, and 16.9% had done this in the past 12 months. Only 0.2% of the sample knew that they were HIV positive and 4% had positive HIV test results when they did the test. Of those with a positive HIV test result, 58.1% were females. Approximately 16% of those with HIV have had an STI infection in the past, and 61% were actively practicing religion. The mean age of first sexual relations for the sample was 15.4 years (SD = 3.2 years), and 15.6 years for those infected with HIV. Four variables emerged as statistically significant factors of Jamaicans’ willingness to do an HIV test in the future. Conclusion: The findings of this research are far-reaching and can be used to guide public health policy formulation.

Keywords: Reproductive health matters, condom usage, HIV, HIV-infected people, sexual relations, sexual behavior, adults, reproductive ages, Caribbean.

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Introduction

Human immunodeficiency virus (HIV) is the second leading cause of death in the world [1-3], the first in the Caribbean (among 15-49 year olds) [4] and the second in Jamaica [5]. The risk of contracting HIV is considered higher in low-income countries, and lowers in industrialized countries. Factors that contribute to such discrepancies in sexual and reproductive risk all over the world are “weak and uneven distribution of health services, the concentration of poverty among certain population groups and geographic areas, gender inequalities and harmful social practices” [1].

This paper focuses on adults in the reproductive ages of 15-49 years. This represents almost 3 billion people in the world, and almost half of all new HIV infections [6]. In Jamaica, youth represents 20% of the population of 2.6 million. The public health dilemma of HIV among youths has led to commitments made by various nations (189
states) of the world at the United Nations General Assembly Special Session (UNGASS) on HIV and AIDS in New York in 2001. Such commitment was made via the signing of a Declaration of Commitment which encapsulates promises to acknowledge the role and contributions of young people in addressing all aspects of HIV and AIDS, recognizing the full involvement and participation of the youth, in designing, planning, implementing and evaluating programs relating to responses to the epidemic; reducing the prevalence of HIV among youths within the range of 15-24 years of age by 25% by 2010, ensuring that 90% of youths have access to information and services that would reduce their vulnerability to HIV infection, ensuring access to information through primary and secondary school curricula on matters of safe and secure environment, strengthening sexual and reproductive health programs, and so on [6].

Under the CARICOM-PANCAP, the strategic objectives for national HIV responses are “to prevent the sexual transmission of HIV, to decrease the vulnerability to sexual transmission of HIV; to establish comprehensive, gender-sensitive, and targeted prevention programs for children (9-14 years old) and the youth (15-24 years old), to achieve universal access to targeted prevention interventions among the most at-risk populations (such as MSM, SW, drug users, prisoners, and migrant populations), to provide services for the prevention of mother-to-child transmission of HIV to all pregnant women and their families; to strengthen prevention efforts among PLHIV as part of comprehensive care; and to reduce vulnerability to HIV through early identification and treatment of other sexually transmitted infections (STIs)” [7]. The achievement of these objectives can also be hindered by policies (for example, legislation against men having sex with men (MSM), the capacity to address legal constraints that hinder access to services, the lack of integration of HIV policies and programs into national development plans and [7] programs, the lack of political support and incongruities between policies and legislations.

Within the context of the high HIV incidence and prevalence rates among people in developing nations, and in particular the Caribbean, and more so among young people, the attitude toward consistent condom usage is problematic and needs to be examined in developing countries. Hence, we wanted to elucidate information as to whether there are differences in the knowledge, attitude and practices of adults in their reproductive years regarding their reproductive health issues, compared with those who have HIV in a Caribbean society, as well as to model factors which account for their willingness to do an HIV test in the future. No study emerged in the Caribbean that has comprehensively examined adults in their reproductive ages (15-49 years) on their sexual and reproductive health attitudes, knowledge and practices, and compares the result with those who are HIV-infected youth, as well as factors which explain people’s willingness to do an HIV test in the future. The present study examines core issues of sexual and reproductive health among youths, particularly with respect to those who are HIV-infected in Jamaica in order to provide a comprehensive understanding of people’s perceptions, which will be used to fashion public health intervention programs.

**Materials and Methods**

**Sample**
The study population comprised people aged 15-49 years who resided in Jamaica at the time of the survey in 2004 (May-August). The population data for this research were collected by Hope Enterprises Limited on behalf of the Jamaican Ministry of Health. A multi-staged sampling design was used to collect the data. Each of the 14 parishes in Jamaica was stratified into constituencies, with each constituency stratified into three areas – rural areas, parish capitals (urban areas) and main towns (semi-urban areas). The areas which comprised a constituency were then stratified into primary sampling units (PSUs) or enumeration districts (EDs).

A random sample of each PSU was then selected, based on probability proportional to size (PPS). Seventy-two PSUs were selected for the study – 23 EDs in urban areas, 25EDs in semi-urban areas, and 24 EDs in rural areas. Twenty-five households were systematically chosen from each ED, and cluster sampling was carried out, where all the people living in the household of the designated areas were interviewed for the survey.

**Data sources**
A questionnaire was used to collect the data from respondents. It was a 154-item instrument. The questions were demographic characteristics, sexual history (including number and type of partners, and having sexual relations with commercial sex workers), condom usage, STIs and health issues, knowledge of HIV/AIDS (including “Have you ever had an HIV test?”, “Did you go back for the results yourself or were you contacted by a health worker?, and “Would you be willing to do an HIV test [in the future]?”). The interviewers were trained for a 5-day period, of which 2 days were devoted to field practices [8]. Interviewers were assigned to a team composed of two females, two males and a supervisor. Oral consent was sought and given before the actual interview would commence. Interviewees were informed of confidentiality and their right to stop the interview at any time, if they should so desire. No names, addresses or other personal information were collected from respondents in order to ensure anonymity and confidentiality. The instrument used in the survey utilized indicator measures and definitions consistent with UNAIDS and the USAID Priority Prevention Indicator [8].

**Statistical analyses**
Data were entered, stored and retrieved using SPSS for Windows, Version 16.0 SPSS Inc; Chicago, IL, USA). Descriptive statistics were performed on particular
sociodemographic characteristics of the sample. Statistical analyses used were an independent sample t-test, ANOVA, and Pearson’s Product Moment correlation. Multivariate logistic regressions were fitted using one outcome measure: self-reported, confirmed positive HIV test results. We analyzed correlation matrices to examine multicollinearity. Where collinearity existed (r > 0.7), variables were entered independently into the model to determine those that should be retained during the final model construction [9]. A p-value < 0.05 (two-tailed) was used to establish statistical significance.

Analytic Model
For this study, the analytic model used is one that can accommodate multiple independent variables on a single binary dependent variable (positive HIV test result, which was confirmed by an agent of the state). Using logistic regression, this paper tested variables identified in the literature as being associated with having a positive HIV test result (Equation [1]):

\[
\text{HIV}_i = f(A_i, X_i, ED_i, E_i, MS_i, C_i, SI_i, N_i, AS_i, L_i, CU_i, K_i, F_i, P_i, T_i, STI_i, R_i, Q_i) \ldots \ldots \ldots \text{Eqn} [1]
\]

where \( \text{HIV}_i \) denotes currently having a positive HIV test result for individual \( i \), \( A_i \) is age of individual \( i \), \( ED_i \) represents educational level of individual \( i \), \( U_i \) means employment status of individual \( i \), \( SS_i \) is social class of individual \( i \), \( AR_i \) indicates area of residence of individual \( i \), \( P_i \) denotes currently having sexual relations with a commercial sex worker for individual \( i \), \( MS_i \) is marital status of individual \( i \), \( Ci \) means length of time dwelling in community for individual \( i \), \( SI_i \) is age of first sexual intercourse of individual \( i \), \( S_i \) represents type of sexual practice of individual \( i \), \( N_i \) is number of sexual partners of individual \( i \), \( Pi \) denotes actively practicing religion of individual \( i \), \( K_i \) is having had an STI of individual \( i \), \( W_i \) represents crowding in household of individual \( i \), \( Qi \) denotes frequency of condom usage of the individual \( i \), and the parameter \( \varepsilon_i \) is the model’s error term.

Using logistic regression to test the hypothesis (Equation [1]), we now know that marital status, employment status, age of respondents, and other variables are associated with those who are currently HIV positive individuals, and can write equation [2].

\[
\text{HIV}_i = f(A_i, MS_i, U_i, P_i, \varepsilon_i) \ldots \ldots \text{Eqn} [2]
\]

Measurement
Crowding is the total number of persons who dwell in a room (excluding kitchen, bathroom and verandah).

Contraceptive method is any device or approach that is used to prevent pregnancy. These methods include tubal ligation, vasectomy, implant (Norplant), injection, emergency contraceptive protection, pill, condom, foaming tablets, creams, jellies, diaphragm, abstinence, withdrawal, the rhythm method, calendar or Billings.

Non-steady sexual partner denotes sexual relations that are casual, with someone with whom the individual is not having a common law sexual union, a visiting relationship or to whom the individual is not legally married.

Old HIV infected people were measured using self-reported information on the “Do you know the result of the test [HIV]", and whether this was positive or negative (1= know positive status, 0 = otherwise).

Knowledge in this study was measured using the following issues: Have you heard of HIV?, Have you heard of a disease called AIDS?, Do you think that a healthy looking person can be infected with HIV, the virus that causes AIDS?

Attitude for this research was measured using the following issues: If a member of your family became sick with HIV, the virus that causes AIDS, would you be willing to care for him or her in your household?, Have you ever had an HIV test?, Would you be willing to do an HIV test [in the future]?

Practice was evaluated from the following questions: Have you ever had sexual intercourse? By ‘sexual intercourse’ I mean vaginal sex (penis in vagina) or anal sex (penis in bottom). At what age did you first have sex?, With how many persons have you had sex during the last 3 months?, Frequency of condom usage with recent, next recent or next most recent partners (in the last 12 months), what did you do to avoid getting pregnant?, ‘the last time you had sex, did you or this partner do anything to delay or avoid getting pregnant?, and ‘have you ever had sex with someone whom you paid for sex, that is, a commercial partner?’

Results
Table 1 presents the sociodemographic characteristics of the sample. The sample consisted of 1,800 respondents (of which males accounted for 48.8%).

No significant statistical association existed between the gender of a respondent and his/her positive HIV test result \( (\chi^2 = 0.900, P = 0.343) \). There was a statistical difference between the mean age at first sexual relations for males.
The mean age of first sexual relations for the sample was 15.4 years (SD = 3.2 years), and a significant statistical difference was found for the mean age of first sexual intercourse among the union statuses (F-statistic = 31.96, P < 0.0001): The mean age of first sexual relations for married people was 16.2 years (SD = 3.1 years); partner who stays overnight (15.2 years (SD=3.0 years)), sees partner occasionally (14.2 years (SD = 3.0 years)), and single (15.6 years (SD = 3.3 years)). Furthermore, the mean age of first sexual relations was greater for those who are actively practicing religion (15.9 years (SD = 3.4 years)) compared to those who are not actively practicing religion (14.8 years (SD = 2.9 years)) – t-test = -6.768, P < 0.0001. Likewise, there was a significant statistical difference for the mean age of first sexual relations and typology of sexual acts performed – F-statistic = 4.273, P = 0.005. The mean age at first sexual relations for those who have had anal sex was 14.0 years (SD = 0.0) compared to those who practice vaginal sex (15.4 years, SD = 3.2) or those who did both (vaginal and anal sex), 12.9 years, SD = 4.17 years.

A statistical correlation existed between the age at first sexual relations and number of sexual partners in the last 12 months (r = -0.246, P < 0.0001).

When the sample was asked “Do you think this partner [current] has other partner(s)?” 35% indicated yes; “Do you sometimes feel embarrassed to buy a condom?” only 12% remarked yes, and “To what extent do you usually have a condom on you?” every time, 20.4%; most times, 14.2%; sometimes, 13.2%; rarely, 13.6% and never, 38.7%. When asked “Can you always find your favorite brand [condom] when you need one in a hurry?” 89.7% said yes. “If that brand [condom] is not available would you take another brand or you would rather do without?, only 1.6% indicated that they would rather go without using a condom, and 22.5% stated that their partner would be upset if he/she found that they had a condom ready available.

The sociodemographic characteristics of those with positive HIV test results were examined in Table 1. Almost 6% of those with HIV had sexual relations with a commercial sex worker. Of those who have had sexual relations with a sex worker, 75% indicated that they had used a condom. Approximately 16% of those with HIV had contracted an STI infection in the past, all of them knew that they had the HIV virus, and 61% were actively practicing religion. Twenty-nine percent of the HIV-infected individuals had given birth in the last 2 years or were at least 6 months pregnant. Twenty-seven percent of the female respondents indicated that they knew the person well (44.7%), 2.6% said they both had HIV, 2.6% indicated that a condom was not available, 5.3% mentioned that the other partner objected to its usage, 7.9% mentioned that they used other contraceptive methods, 5.3% said that they did not need to,
7.9% said no special reason and 13.2% indicated that they had not thought of it.

Table 2 presents information on knowledge of the sample and those who are infected with HIV. Among those who are infected with the HIV virus, almost 73% indicated that they had at most a slight chance of contracting the virus compared to 86.6% of the sample. Only 8.1% of the infected respondents stated that there was a good probability of their contracting the virus compared to 6.1% of the sample.

Table 2 Knowledge, attitude and practices of sample and of HIV infected sample

| Characteristic                          | Sample       | HIV infected |
|----------------------------------------|--------------|--------------|
| Heard about HIV                        | Yes          | 1798(99.9)   | 74 (100.0)  |
|                                        | No           | 1 (0.1)      | 0 (0.0)     |
| Heard about AIDS                       | Yes          | 1796(99.8)   | 74 (100.0)  |
|                                        | No           | 3 (0.2)      | 0 (0.0)     |
| Methods of protection from HIV or AIDS | Have one sexual partner | 574 (32.0) | 16 (21.9)  |
|                                        | Use a condom  | 756 (42.3)   | 42 (57.5)   |
|                                        | Use a condom sometimes | 7 (0.4) | -           |
|                                        | Use a condom at all times | 339 (18.9) | 8 (11.0)   |
|                                        | Abstain       | 95 (5.3)     | 6 (8.2)     |
|                                        | No sex with strangers | 4 (0.2) | -           |
|                                        | No blood transfusion | 0 (0.0) | -           |
|                                        | Avoid homo/bisexuals | 0 (0.0) | -           |
|                                        | Other         | 3 (0.2)      | 1 (1.4)     |
|                                        | Nothing       | 13 (0.7)     |             |
| Protective measure from contracting HIV/AIDS | Yes         | 1516(84.5)   | 62 (83.8)   |
|                                        | No            | 279 (15.5)   | 12 (16.2)   |
| Have you spoken about safe sex          | Yes          | 995 (58.6)   | 57 (79.2)   |
| with current partner                    | No            | 702 (41.4)   | 15 (20.8)   |
| Can healthy people contract HIV/AIDS virus? | Yes         | 1732(96.9)   | 71 (95.9)   |
|                                        | No            | 41 (2.3)     | 2 (2.7)     |
|                                        | Don’t know    | 15 (0.8)     | 1 (1.4)     |
| Knowledge of someone with HIV or who died from AIDS | Yes, close relative or friend | 284 (15.8) | 13 (17.6) |
|                                        | Yes, not a close friend or relative | 437 (24.3) | 20 (27.0) |
|                                        | At a workshop  | 8 (0.5)      | 1 (1.3)     |
|                                        | No            | 979 (54.4)   | 40 (54.1)   |
|                                        | Not sure      | 90 (5.0)     | -           |
| Would you care for a family member with AIDS? | Yes         | 1404(78.2)   | 58 (78.4)   |
|                                        | No            | 117 (6.5)    | 6 (8.1)     |
|                                        | Don’t know    | 275 (15.3)   | 10 (13.5)   |
| Chance of contracting HIV               | None          | 887 (52.8)   | 30 (40.6)   |
|                                        | Little         | 569 (33.9)   | 24 (32.4)   |
|                                        | Moderate       | 116 (6.9)    | 8 (10.8)    |
|                                        | Good           | 108 (6.4)    | 6 (8.1)     |
|                                        | Don’t know     | -            | 6 (8.1)     |

Seventy-eight percent of the sample indicated a willingness to do a HIV test, and when asked “What is your reason for not being willing to do the test?” the majority did not want to know their status, 59.9%; no need to know (because not sexually active), 15.3%, and 9.9% mentioned that they do not have the virus. Figure 1 shows that more people who are HIV positive indicated that they had never used a condom with their recent partner as well as the next most recent partner.

![Fig. 1 Frequency of condom usage with recent, next recent and next most recent partner for Sample and HIV infected sample.](image)

Table 3 shows the variables which explain those who are willing to do an HIV test in the future. Using logistic regression analyses, four variables emerged as statistically significant factors of Jamaicans’ willingness to do an HIV test in the future. The model had statistically significant predictive power (model $\chi^2 = 31.86, p = 0.032$; Hosmer and Lemeshow goodness of fit $\chi^2 = 5.17, P = 0.74$), and correctly classified 87.0% of the sample.

**Discussion**

Approximately 33.2 million people in the world are living with HIV or AIDS, of which 30.8 million are adults and 15.5 million are women, while 2.0 million are children [10]. In the Caribbean, HIV prevalence represents 1% in 2007, with 15,000-17,000 newly infected cases and approximately 11,000 deaths, with a higher infection rate among men than women (ratio = 2:1) [7]. However, young women are more likely to become infected with the virus because the tissue lining of the genital tract is not fully developed; hence their thinner mucus membranes are less protective than older women [11]. In other words, the transmission of HIV from male to female is two to ten times more likely than female to male [12]. As a result, the people of Thailand and Uganda, for example, blame women for the transmission of the virus; while in East Africa, the word STI is referred to as a disease of women [11].

In the case of Jamaica, approximately 1.3% of the adult population is infected, with two-thirds not knowing their status [8]. Of the number of infected adults, 4,447 [13] (out of the 27,000 infected cases) started antiretroviral treatment – thus representing 69% coverage of the estimated 7,000 persons who require antiretroviral therapy [13]. This also includes 400 antiretroviral-treated children...
out of those who are infected [13]. This is tantamount to bringing Jamaica closer to providing universal coverage with respect to HIV treatment [14].

Table 3 Logistic regression analyses: Variables of willing to do HIV test in the future

| Variable                                      | B Coefficient | Wald statistic | Odds ratio | CI (95%)   |
|-----------------------------------------------|---------------|----------------|------------|------------|
| Married                                       | -0.83         | 3.96           | 0.44*      | 0.19 - 0.99|
| Visiting unions                               | -0.69         | 2.70           | 0.50       | 0.22 - 1.14|
| Single (reference group)                      |               |                | 1.00       |            |
| Practice vaginal sexual acts                  | -0.51         | 0.18           | 0.60       | 0.06-6.12  |
| Practice anal sexual acts                     | 22.22         | 0.00           | 4476198076.84 | 0.00 - 1.00 |
| No sexual relations (reference group)         |               |                | 1.00       |            |
| Full time employed                            | -0.15         | 0.17           | 0.86       | 0.42 - 1.76|
| Part time employed                            | -0.61         | 0.83           | 0.54       | 0.15 - 2.02|
| Student                                       | 1.16          | 4.46           | 3.20*      | 1.09 - 9.42|
| Unemployed (reference group)                  |               |                | 1.00       |            |
| Tertiary                                      | -0.79         | 0.66           | 0.45       | 0.07 - 3.05|
| Secondary                                     | -1.32         | 1.97           | 0.27       | 0.04 - 1.69|
| Primary or below (reference group)            |               |                | 1.00       |            |
| Age                                           | 0.04          | 4.15           | 1.04*      | 1.00 - 1.08|
| Sexual relations with commercial worker       | 0.27          | 0.13           | 1.30       | 0.31 - 5.55|
| No. of sexual partner in last 12 months       | 0.01          | 0.03           | 1.01       | 0.93 - 1.09|
| Used condom on first sexual relation (with current partner) | 1.06 | 6.48 | 2.90** | 1.28 - 6.58 |
| Only one time had sexual relations with person | -0.27         | 0.15           | 0.76       | 0.19 - 3.04|
| Had STI                                       | -0.58         | 1.60           | 0.56       | 0.23 - 1.37|
| Actively practicing religion                  | -0.36         | 1.27           | 0.70       | 0.38 - 1.30|
| Age at first sexual relations                 | -0.05         | 1.13           | 0.95       | 0.86 - 1.05|
| At least most time used a condom              | -0.67         | 2.49           | 0.51       | 0.22 - 1.18|
| Moderate condom usage                         | -0.04         | 0.01           | 0.96       | 0.42 - 2.19|
| Never used condom                             |               |                | 1.00       |            |
| Male                                          | 0.37          | 1.00           | 1.44       | 0.70 - 2.96|
| Constant                                      | -0.30         | 0.03           | 0.74       |            |

Model $\chi^2(19) = 31.86, P = 0.032, -2 \text{Log likelihood} = 316.37, \text{Nagelkerke r-squared} = 0.127, \text{Hosmer and Lemeshow (df} = 8) = 5.17, P = 0.74, \text{Overall correct classification} = 87.0\%$, $^*P<0.05, **P<0.01, ***P<0.001$.

Adolescent females (age 10-19) have a two and a half times higher risk of HIV infection than boys of the same age group. This is owing to social factors such as young girls having sexual intercourse with older men [15].

In terms of sexual orientation, the HIV/AIDS endemic has plagued humanity for more than 20 years; and infection rates continue to grow. Persistent behavioral, social and cultural factors continue to fuel the HIV epidemic [16]; coupled with the fear that friendship with an HIV positive person would cause self-stigmatization [17]. Owing to the stigma and discrimination, people living with HIV (PLHIV) tend not to disclose their HIV status, hence the potential spread of the infection [7]. Other factors include fear of rejection, side effects of HIV drugs, uncertain life span, disclosure of transmission and the impact of loss [18]. The authors also noted that without support it becomes extremely difficult for adolescents and youth, the most vulnerable group (15-24 year olds), to adhere to treatment.

Research has shown that more than 25% individuals are not cognizant of the status of their sexual partner and that 40% do not use condoms [7]. With regard to Jamaica, approximately eight out of every hundred persons (7.9% of the population) engages in risky sexual activity [8]. Research has shown significant relationships between age, relationship status and condom use [8]. In addition, condom usage was not prevalent among main partners, especially where multiple partnerships existed (75.1% males aged 25-49; 70.1% females aged 15-24), thus resulting in approximately 25-30% of individuals who expose themselves as well as their partners to HIV and other STIs [8].

STI case rates (per 100,000 persons) reported a steady increase over the period 2006 (637.77 ), 2007 (787.17 ) and 2008 (850.43) for infections such as Pelvic Inflammatory Disease, Herpes, Chancroid, Bacterial Vaginosis, Trichomoniasis, Candidiasis, Ophthalmia Neonatorum and Congenital Syphilis [13]. Where cost of
and access to condoms poses a challenge, youths become more vulnerable to HIV. This results in 90% of girls (10-15 year olds) refraining from using male condoms, while both cost and concerns regarding the female condom become a barrier [19]. In some instances, access to contraceptives (especially male condoms) is more favorable to males than females, as the latter encounter barriers such as being shunned or chastised [20].

In terms of sexual orientation and status, approximately 10% of HIV cases in the Caribbean represent men having sex with men (MSM); while commercial sex workers (CSW) vary from 9% to 31% [7,21]. While there are persons who are ignorant of their HIV status because of non-testing [22, 23], there still remain those who lack knowledge about HIV. The literature pointed out that where there is a lack of knowledge, combined with early sexual activity, these factors put youths at risk of not only unintended pregnancy, but STIs and HIV [5]. This resulted in 86% of 1,000 participants who were surveyed not considering themselves personally responsible for being pregnant and/or contracting STIs and HIV [5]. Despite widespread information on HIV, the global community still lags behind in prevention efforts. For instance, in 24 Sub-Saharan countries approximately two-thirds of young women lack adequate knowledge of HIV transmission [6]; also fewer than one in five people at risk for infection globally have access to basic prevention services [6]. Sexual relation is mainly the medium through which most people contract HIV/AIDS [24], indicating that the lack of knowledge (or low) is affecting the risky sexual behavior.

It is imperative to note that a lack of knowledge regarding HIV is fuelled in part by poverty, which makes it difficult for persons to learn about HIV or to purchase condoms or antiretroviral drugs [25]. However, the adoption of voluntary counseling and testing (VCT) is seen as a way to remedy a lack of knowledge regarding the infection and thus facilitates safer behavior [26]. Nonetheless, although there has been evidence of success regarding VCT, the issue of confidentiality is often expressed. Adults and young people, who refrain from VCT, claim that they fear being identified at a testing site, with the possibility of having a health care provider who knows them and may share their information with someone else [26]. It is also recognized that many young people, especially adolescents, do not have independent access to HIV prevention services, despite the fact that the age of sexual debut is earlier than the age of legal majority [27].

Another way of curtailing the spread of HIV among adolescents and reducing new infection was the recommendation for routine, opt-out HIV screening without separate written consent or prevention counseling for persons within the age range of 13 to 65 years [28]. Jamaica’s prevention and service strategies for young females (15-24 years of age) encompasses components such as legislation, policy, programs, service availability, participation and rights [19]. The social reality is that the age at first sexual intercourse of Jamaicans was 15.4 years and 15.6 years for those with HIV, which indicates that intervention measures must be instituted with urgency to address this public health concern.

Among the realities that emerged from this study is the inconsistency with which Jamaicans used a condom, and this was also the case with HIV patients. A study by Wilks et al [22] found that 24.4% of Jamaicans (ages 15-74 years) had more than one partner, 48.4% had sex once per week, while those with secondary education were more likely to have more partners compared to those with at most primary level education, while those with tertiary education were the least likely to have multiple partners.

It is also evident that parental consent is deemed to be the greatest legal barrier to minors/adolescents being able to access HIV testing on their own. In cases where parental consent is not required under state law or policy, an increased number of minors visit test sites and receive antibody tests. The literature recommended therefore that the desire of minors to receive HIV testing without parental consent should be treated as a right of the said minors [29].

Conclusion
In summary, HIV is not a homosexual virus but a heterosexual phenomenon. While more Jamaicans between the ages of 15-49 years who were diagnosed with HIV were in visiting relationships, marginally less of them were married or in common-law unions.

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