The first confirmed case of HIV/AIDS in the Caribbean was reported in 1982, however a recent report by UNAIDS shows that the epidemic has risen to over 250,000 persons living with the virus with the highest prevalence rates shown to be in the Dominican Republic and Haiti. Various factors ranging from commercial sex trading to unsafe injection employed for drug abuse have been identified to play a contributing role in this increase. Also, the role and impact of tourism on the spread of HIV infection has been reported. Due to concerns shown by countries and territories who are dependent on tourism and that they rank amongst the most highly affected by HIV/AIDS in the region, this paper endeavours to examine the impact of HIV/AIDS and the contributing role of tourism to HIV/AIDS epidemic in the Caribbean.

Keywords: HIV/AIDS, Caribbean, Tourism, Epidemic, Impact

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Introduction
HIV/AIDS poses a major threat to the human population as this global epidemic appears to be spreading at an alarming rate. HIV/AIDS transmission is seen as an infection influenced by attitudes and behavior which are closely associated with sexual practices. This is particularly so where a person who has more than one sexual partner together with factors such as social, political, environmental, biological and physical contributing to it.1,2

According to a recent report the Caribbean has an HIV/AIDS prevalence rate of 1.1%, considered to be second in the world after sub-Saharan Africa, and the most affected in the Americas.3 Despite a certain level of knowledge and awareness of the virus in the Caribbean, the incidence of new cases of HIV/AIDS is still on the increase, making it one of the leading causes of death among persons aged 25 to 44 years. In 2007, it was estimated that about 17,000 newly infected cases were identified in the region, which translates to about 230,000 people living in the Caribbean with HIV.3

Tourism is one of the largest and fastest growing industries in the Caribbean with the socioeconomic organization revolving around it. Tourists to the region are largely drawn from North America and Europe and they usually behave in a way that differs from their normal behaviour when they are away from home. It is believed that this type of behaviour favors the abusive use of drugs and alcohol as well as unprotected sexual intercourse which could facilitate the transmission of HIV and other STDs between tourists, between tourists and natives and between tourists and sex workers.4-6 Other factors that have been identified to exacerbate the epidemic of HIV/AIDS in the Caribbean include poverty, unemployment, stigma, discrimination and gender inequalities.7,8

The Caribbean is a region consisting of the Caribbean Sea, its islands and the surrounding coasts. The region is located southeast of North America, east of Central America and to the north of South America. The total regional population has been estimated to be 37.5 million in 2000. The geography and the climate of the region vary from one place to another; some islands in the region have a relatively flat terrain of non-volcanic origin while others display mountainous landscapes with active volcanoes, good beaches as well as up-market hotels which cater for tourists.

We hope to instill awareness to this very important health issue in the region by reviewing the impact of the HIV/AIDS epidemic in the Caribbean on the socioeconomic life as well as the contributing role of tourism to the epidemic in the region.

HIV/AIDS in the Caribbean
The first case which was positively identified for HIV/AIDS in the Caribbean was reported in Jamaica in 1982 and by the end of 2007, the number of people...
living with HIV infection in the region has risen to one-quarter of a million with the highest percentages living in the Dominican Republic and Haiti.\(^7\)

According to reports, heterosexual transmission accounts for the majority of HIV/AIDS cases in the region, with a growing number of women especially young people becoming infected and who continue to be at risk. The commercial sex trade is seen to play a prominent role in the transmission pattern in the region with unprotected sexual intercourse between sex workers and clients being a significant factor in the transmission of HIV. Among female sex workers, HIV prevalence of 3.5% has been reported in the Dominican Republic, 9% in Jamaica and 31% in Guyana.\(^8\) -\(^11\)

The practice of injecting drugs is responsible for a minority of HIV infection however, it has been found to contribute significantly to the spread of the virus in Bermuda and Puerto Rico. Unsafe sexual intercourse between men is a significant factor in this region however, it is largely hidden due to the associated stigma.\(^7\) Haiti has been reported to account for the largest HIV burden in the Caribbean through heterosexual contacts. A national population-based survey indicated the adult national prevalence rate to be 2.2% in 2005 whilst the rest of the Caribbean region seems to show a relatively steady state of the HIV epidemic.\(^12\)

The impact of the spread of HIV infection in the Caribbean seems to be uneven as some households have been devastated when members of their families fall ill while other households have suffered little. The factors contributing to the spread of HIV/AIDS are numerous including amongst others poverty, violence, prejudice and ignorance. Social and economic circumstances have made many families vulnerable to HIV/AIDS by accepting or adopting a behavior that does not favor a healthy family structure. The impact of HIV/AIDS extends beyond those living with the virus, as each infection produces consequences that affect the lives of the family, friends and community surrounding the infected person and in particular children and young adults. The role of poverty in the spread of HIV/AIDS is very significant and the attempt to overcome it in the family sometimes overshadows the precautions required to avoid the spread of the virus. Poverty drives young adults to take jobs that expose them to sexual exploitation such as working in night bars and massage parlours in many tourist centres.

To date HIV/AIDS has no cure and with the mode of transmission, very often more than one family member is infected/affected and eventually dies; as a result, the entire assets and savings of many families, which are generally meagre before the onset of the disease, may be completely depleted, leaving surviving family members without any means of financial support.

Many studies have examined the impact of HIV/AIDS on the development of the Caribbean region and a major concern is the impact it has on the poverty status of households. In the Caribbean, HIV/AIDS is presently considered to be the leading cause of death among the energetic, productive, economically active group of young adults. Being the most economically active often translates into being the ‘breadwinners’ for individual households and frequently also for the extended family. In the event that the breadwinner is not infected, the additional expense of caring for the infected person will still be of economic concern. Loss of earnings and increased expenditure due to both illness and death will have adverse effects on any household, regardless of its initial financial status. Many studies however, revealed that not only is the incidence of poverty higher for households affected by HIV/AIDS, but that the situation is less likely to improve even after a person’s death.\(^7\)\(^,\)\(^13\)\(^-\)\(^15\)

**Tourism in the Caribbean**

Tourism is defined as activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes.\(^16\) From the 1960s, it has emerged from being a relatively small scale activity into a global economic phenomenon and at present is described to be one of the world’s largest and fastest growing economic sectors.\(^16\)\(^,\)\(^17\)

Many Caribbean islands offer a diversity of landscapes in a small area.\(^18\) Many governments in the Caribbean welcome tourists with open arms because it is believed that tourism would boost their economy. Caribbean islands nowadays depend to a large extent on tourism to boost their economy, often being referred to as “the engine of their growth”. The industry has also benefited farmers, fishermen, and merchants because they must produce and supply more food in order to feed the large number of visitors.

The tourism industry is extremely capital intensive as western-style amenities are needed in order to attract tourists. These amenities include amongst others airports of international standard, roads, sewage treatment plants, landfills, electricity, telephones and hotels of various standards.
Some of the Caribbean tourism industries provide the vacationers the luxury of staying in all-inclusive resorts where tourists rarely eat out at locally owned restaurants, rent water sports gear from local entrepreneurs, or arrange island tours with local taxis.

The advent of tourism has resulted in high cost of living due to amongst others inflation of the food and land prices. On many of the Caribbean islands, local people can no longer afford to live along their own coastline due to the inflation that is being experienced, or due to the construction of many tourist hotels.

Furthermore, the tourism industry has also functioned in a manner which negatively impacts on the indigenous Caribbean culture. The tourism industry has historically been attributed with a characteristically white, middle-class European and American clientele, which to a large degree influences the previous way of life as the emphasis of tourism is directed for the benefit of the economy however, it also serves to pervert the indigenous culture. For instance, a traditional carnival has become an inauthentic commercialized event which is used to lure tourists solely for economic gain. Historically, the festival emphasized a mythological basis, one which demonstrated the holy trinity and the nation’s unity.

It is also important to note that with over 20 million visitors each year, the main economic activity in the majority of Caribbean nations has become tourism related, accounting for up to more than half of the gross domestic product (GDP) in some countries. (Bahamas 59%, Barbados 51%, Antigua and Barbuda 55%). In St Lucia, the tourism sector currently accounts for approximately 38 per cent of GDP and 73 per cent of the total exports of goods and services, with an average of 10.2 per cent of the island’s total labour force working in the hotels and restaurants.\(^\text{19}\)

It has been shown that countries and territories dependent on tourism rank amongst those most highly affected by HIV/AIDS. In islands such as the Dominican Republic and Jamaica, it has been observed that the highest incidences of HIV/AIDS are concentrated in the areas most popular for tourism activities or in the resort areas of the island. The emergence and continuing growth of sex tourism has also increased the rate of HIV transmission in the already vulnerable and high-risk group of commercial sex workers.\(^\text{7,19}\)

**Sex Tourism in the Caribbean**

The term ‘sex tourism’ is used to describe a wide range of commercial and other forms of sexual encounters between visitors to a country and their hosts. While the relationship between travel and participation in sexual activities has been extensively documented, there has been relatively little examination of the role encounters of this nature have on the national image and the motivation to travel to a specific destination.\(^\text{20}\) Although the sex industry is an unofficial part of the tourism industry, it however represents a more traditional response to male and female sexuality which has a history that considerably pre-dates modern tourism. A number of researchers have observed that political leaders have directly or indirectly supported tourism-orientated sex work.\(^\text{21,22,23}\)

Sex tourism is a universal phenomenon which is becoming increasingly evident and widespread. It is practiced in one form or another in urban centres, towns and rural areas in both developed and developing countries. It is known that sex work appears to be fostered when a demand for sexual services and a favorable setting coexist. Increasingly, sex work is associated with some form of travel and tourism. There are considerable differences from one location to the next in the way sex work is organized and in its level of visibility. Studies have also revealed that the impetus driving the sexual transaction can vary widely within and between communities. Although fewer in number than female sex workers, men also engage in sex work in diverse social and cultural settings. There is growing evidence that male sex work is not a phenomenon that is limited only to certain regions. Even though information from countries in the developing world remains very limited, male sex work has been reported in various countries in Latin America, the Caribbean, Asia and Africa. According to a study done in Dominican Republic, male sex tourists, mostly from the United States and Europe, come to the Caribbean islands to engage in homosexual activities with the locals, many of whom have female partners, thereby representing a potential for heterosexual and homosexual transmission of HIV as well as others STDs.\(^\text{15}\)

The current understanding of the extent to which men frequent sex workers remains equally limited. Although the likelihood of underreporting is high, surveys which have been carried out in different populations showed that a substantial percentage of men report having had sexual contact with sex workers. A previously published survey of 236 male German sex tourists who traveled to the Dominican Republic, revealed that the typical visitor is 32 years old, single, has an average annual income of US$ 37500, spends 21 days on the island and is engaged in sexual intercourse with 3 to 4 different Dominican women during his stay.\(^\text{13}\) In addition to male
sex tourism, female sex tourism also exists in the Caribbean. A preliminary study done in the Dominican Republic in 1992 among 22 male sex workers showed that 70% of female tourists traveling alone, engage in sexual intercourse with the local men.5

Significantly higher rates of HIV infection have been documented among sex workers and their clients as compared to most other population groups within a country.24 HIV infection often spreads among sex workers before spreading into the general population, though the true extent remains unknown, most possibly due to the clandestine nature of sex work in most communities, even in the Caribbean. This makes it difficult to determine the true extent of the sex industry, although it is acknowledged to be substantial and has been shown to be increasing in recent years.

It has been reported that individuals enter sex work for various reasons, but economic factors may be the primary reason why sex work exists in the Caribbean. Various studies on the interrelationship between HIV/AIDS and tourism, sexual activity of unaccompanied travelers with fellow tourists and the local population indicate that such encounters are particularly frequent.25 Also condom use in sexual contacts with fellow tourists and local population is not consistent and many young people make new friends on holidays and build up relationships that also include sexual contacts.26 It has also been shown that alcohol consumption has an important impact on the sexual behavior of tourists.25,26 One such study done in England found that half of all tourists had made at least one new boy/girlfriend during their vacation and about one quarter of them had engaged in sexual activity with a person whom they had just met.27

The same study showed that men are more likely to have sexual intercourse while on holiday, but women on vacation are less likely to use condoms when they engage in sexual intercourse.27 A similar research done in Thailand showed 75% of female tourists who had sex with local partners did not use a condom, while the comparable rate for male tourists was 42%. It should be noted that sex drive and sexuality are powerful human emotions that have been exploited by the tourism industry to develop aspects of destination image.20,21

Sex work is rampant in many tourist centres, and when offered in an exotic location, it has considerable appeal to some groups of tourists. Many studies have also examined the role of the sex industry as a tourism resource.28-40

The Caribbean continues to experience an increase in the HIV/AIDS epidemic in spite of a range of measures which were introduced to combat the spread. The rate of HIV infection among commercial sex workers however is unknown due to the absence of data.

It has been observed in general that tourism workers are more frequently in contact with the tourists to the Caribbean than with the local population. This factor is also known to expose them to a greater number of sexual partners and therefore they tend to have more casual sexual relationships than the resident population.41

In the current generally unregulated sex industry, there is considerable high potential for customers to become infected with sexually transmitted diseases (STDs) including HIV/AIDS. Where a tourist becomes HIV infected because of governmental neglect, perhaps as a result of an infected government employee being allowed to continue working, the government may have to accept some degree of culpability. While not a major issue at present, consumer protection laws in Europe appear to be moving in this direction.

HIV/AIDS has been described as being primarily heterosexual in the Caribbean; however sexual contact between Caribbean male sex workers and male tourists may be a major contributor to the HIV/AIDS epidemic than has been previously observed.15

The Caribbean has become increasingly dependent on money obtained from tourism and currently young men have fewer options for making a living. Many men, who are unemployed in the rural areas, migrate to the tourism areas where they could engage in heterosexual and sometimes homosexual intercourse, and these men often do not inform their female partners about their involvement in sex work, therefore exposing their female partners to the risk of contracting HIV infection. Concerns have been expressed that the HIV/AIDS epidemic might be discouraging tourists from visiting certain destinations perceived to have high rates of HIV infection. An example is the British Broadcasting Corporation (BBC) news reported a link between the growth of the tourism sector and the spread of HIV in Thailand through drug use among the youth and commercial sex workers as reported by the AIDS Care, Education and Training (ACET) in Jersey, USA.42 This report indicated that the spread of HIV infection has made some potential tourists have a rethink concerning a vacation to Thailand. Surprisingly, a study done in the Dominican Republic showed that an overwhelming proportion of tourists did not consider the prevalence of HIV infection to be a factor when making their travel
plans, and that most did not consider themselves to be at greater risk of becoming infected while on holiday than when they were at home.  

Conclusion
There is a considerable concern about the impact of tourism on the HIV/AIDS epidemic in the Caribbean as shown in this review. While tourism is significantly contributing to the economy of the Caribbean islands, the role of tourism in the spread of HIV infection need to be re-examined with a view to address its negative impact. To limit the impact and reduce the further spread of HIV infection via this route, a number of recommendations are suggested. It is our opinion that if these recommendations are implemented, it will substantially reduce the impact of the HIV/AIDS epidemic through tourism and related activities in the Caribbean.

Recommendations
Successful HIV/AIDS prevention and care programmes for those involved in sex work and other risky behaviour should use a combination of strategies in addressing the HIV/AIDS epidemic. Effective key strategies that have been identified which can reduce the spread of HIV infection and the impact of HIV/AIDS are as follows:

- Promotion of safer sexual behavior among sex workers, clients and institutions or groups associated with sex workers such as the police and sex workers’ partners.
- Availability of condom and information on its correct use.
- Ability to negotiate sex (negotiation skills) and supportive policies which promote safer sexual practices.
- Promotion and availability of STI prevention and care services.
- Outreach work that includes health, social and legal services.
- Peer education among sex workers, clients and associated groups.
- Care of people living with HIV/AIDS.
- There should be advocacy for policy and law reform at local and national levels, including respect for human rights.
- Promotion of sex education among the youth at an early age should be encouraged.
- The HIV/AIDS preventive strategies should take into consideration the cultural beliefs of the people as perception plays an important part in responding to these measures.
- Increase and encourage the testing of the people especially among the commercial sex workers, women and children who are at risk.
- The Governments of the Caribbean nations should ensure increased availability of antiretroviral drugs.
- Increase the reporting of HIV/AIDS cases and safe sex promotion through the media.
- There should be a concerted effort on the part of the government to register commercial sex workers, for effective health surveillance as well as for treatment and prevention.

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