The HIV Epidemic in the Caribbean

Meeting the Challenges of Achieving Universal Access to Prevention, Treatment and Care

JP Figueroa

ABSTRACT

The HIV prevalence in the Caribbean is estimated at 1.0% (0.9% – 2%) with 230 000 persons living with HIV/AIDS. HIV rates vary among countries with the Bahamas, Guyana, Haiti and Trinidad and Tobago having HIV rates of 2% or above while Cuba's rate is less than 0.2%. However, throughout the Caribbean, HIV rates are significantly higher among those groups most at risk such as commercial sex workers, men who have sex with men and crack/cocaine users. The Caribbean Community (CARICOM) Heads of Governments declared AIDS to be a regional priority in 2001. The Pan Caribbean AIDS Partnership (PANCAP) was formed to lead the regional response to the HIV epidemic. National HIV Programmes have made definite progress in providing ARV treatment to persons with HIV/AIDS and reducing death rates due to AIDS, decreasing HIV mother-to-child transmission and providing a range of HIV prevention programmes. However, HIV stigma remains strong in the Caribbean and sexual and cultural practices put many youth, women and men at risk of HIV. The Caribbean has set itself the goal of achieving universal access to HIV prevention, treatment and care. Several challenges need to be addressed. These include reducing HIV stigma, strengthening national responses, scaling-up better quality prevention programmes with greater involvement of vulnerable populations, more supportive HIV policies and wider access to ARV treatment with better adherence. In addition, there needs to be improved coordination among PANCAP partners at the regional level and within countries.

La Epidemia del VIH en el Caribe

Enfrentando los Desafíos para Lograr un Acceso Universal a su Prevención, Tratamiento y Cuidado

JP Figueroa

RESUMEN

La prevalencia del VIH en el Caribe se estima en 1.0% (0.9%–1.2%) con 230 000 personas viviendo con VIH/SIDA. Las tasas de VIH varían de un país a otro, teniendo Bahamas, Guyana, Haití y Trinidad y Tobago tasas de VIH de 2% o por encima, mientras que la tasa en Cuba es menos de 0.2%. Sin embargo, en todo el Caribe, las tasas de VIH son significativamente más altas entre los grupos en riesgo, tales como las trabajadoras del comercio sexual, los hombres que tienen sexo con otros hombres, y los consumidores de crack/cocaína. Los Jefes de Gobierno de la Comunidad del Caribe (CARICOM) declararon el SIDA una prioridad regional en 2001. La Asociación Pancaribeña contra el SIDA (PANCAP) se formó con el propósito de dirigir la respuesta regional a la epidemia del VIH. Los programas nacional de VIH han progresado definitivamente en cuanto a ofrecer tratamiento ARV a personas con VIH/SIDA y reducir las tasas de muerte debido al SIDA, disminuir la transmisión del VIH madre a hijo, y brindar una variedad de programas de prevención del VIH. No obstante, el estigma del VIH sigue siendo fuerte en el Caribe y las prácticas culturales ponen a muchos jóvenes, mujeres y hombre en riesgo de contraer el virus. El Caribe se ha planteado el objetivo de lograr acceso universal

From: Ministry of Health, Jamaica, 2 King Street, Kingston, Jamaica.

Correspondence: Dr JP Figueroa, Chief of Epidemiology and AIDS, Ministry of Health, 2 King Street, Kingston, Jamaica, e-mail: figueroap@moh.gov.jm

a la prevención, tratamiento y cuidado del VIH. Para ello, se hace necesario enfrentar ciertos retos. Los mismos incluyen reducir el estigma del VIH, fortalecer las respuestas nacionales, aumentar la calidad y el número de programas de prevención con mayor involucración de la población vulnerable, implementar políticas de mayor apoyo en relación con el VIH, y lograr un acceso más amplio a la terapia de ARV con mejor adhesión, Además, se hace necesario mejorar la coordinación entre los socios del PANCAP a nivel regional y dentro de los países.

West Indian Med J 2008; 57 (3): 196

The Caribbean has the second highest HIV prevalence rate in the world after sub-Saharan Africa. In 2007, the HIV prevalence rate was estimated at 1.0% with a range of 0.9% to 1.2% (1). An estimated 230 000 persons in the Caribbean are living with HIV/AIDS which is one of the leading causes of death among persons aged 25–44 years (1). This paper presents an overview of the HIV epidemic in the Caribbean, the response by the countries and the challenges that remain.

The Caribbean includes 29 nations and territories stretching from Belize and Central America in the East to Guyana, Suriname and Cayenne, South America in the South West with an archipelago of islands forming an arc between these two points. The population of 39 million includes persons of African, European and Asian descent as well as indigenous populations. There is great cultural and religious diversity throughout the Caribbean though a shared colonial heritage and geographic space have forged an emergent Caribbean culture and cosmology. There is significant movement among the people within the region and outside of it especially to the North. There are an estimated 20 million visitors to the Caribbean annually most of whom are from the North.

The Epidemiology of HIV in the Caribbean

Reported AIDS cases from the 21 Caribbean countries affiliated to the Caribbean Epidemiology Centre (CAREC) have increased annually up to 2003 (except for 2000) (2). However, the AIDS epidemic curve appears to be flattening since 2000. These data must be interpreted with caution due to significant under-reporting from many countries as well as a considerable lag in reporting from some countries. In addition, reported AIDS cases are not an accurate reflection of the current status of the HIV epidemic due to a number of reasons including the long incubation period between HIV infection and the development of AIDS. Some Caribbean countries (*eg* Haiti) do not report AIDS cases and several of the larger Caribbean countries are not included in CAREC reports. On the other hand, new AIDS cases have shown a definite decline in Bermuda and the Bahamas.

The HIV epidemic in the Caribbean is due mainly to heterosexual transmission with approximately 60% of AIDS cases reported to CAREC being in this transmission category (2). Homo/bisexual transmission accounts for approximately 15% and vertical transmission 6% of cases. Injection drug use is less than 2% and is reported mainly among Caribbean men with AIDS deported from the USA. Injection drug use is rare in most Caribbean countries with the exception of Bermuda and Puerto Rico. HIV transmission due to blood transfusion is rare in the Caribbean. However, the HIV transmission category of 17% of AIDS cases reported to CAREC is stated as unknown. This is due primarily to two reasons. Many of these cases are reported late or following death and cannot be properly investigated. On the other hand, some cases are investigated but the health provider is unable to rule out same sex behaviour among men. Thus, a proportion of AIDS cases classified as unknown are likely to be bisexual men. Despite the failure to classify some AIDS cases as due to homo/bisexual transmission, most persons in the Caribbean become HIV-infected due to heterosexual transmission.

In the early years of the epidemic, more men were reported with AIDS than women. This was primarily due to the greater risk behaviour of heterosexual men than women as well as HIV transmission among men who have sex with men (MSM). As the epidemic became generalized increasing numbers of women have become infected and approximately equal numbers of men and women are now reported with AIDS. More women than men are reported as HIV-positive (non-AIDS). However, this could be due, at least in part, to more women being HIV-tested than men.

Reported risk behaviour among persons with AIDS in Jamaica indicates that over 80% have two or more sexual partners in the past year, 24.5% participated in commercial sex (mainly men buying sex from a female sex worker), 46.1% have a history of a sexually transmitted infection, 8.3% report crack/cocaine use and 1.1% used injected drugs [mainly while abroad] (3). However, nearly 20% of persons with AIDS report no obvious risk factor. These are mainly women who are infected by their regular sex- partner or spouse.

Adult HIV prevalence rates do vary among Caribbean countries [Table 1] (1, 4). The Bahamas, Guyana, Haiti and Trinidad and Tobago are assessed as having HIV prevalence rates of 2% or above. HIV rates in Barbados and Jamaica are estimated to be approximately 1.5% while many Eastern Caribbean countries have rates under 1%. Cuba's HIV rate is the lowest in the Caribbean at under 0.2%. The Cuban government has taken a very proactive approach to HIV control including systematic HIV testing of their adult population during the 1990s. The early detection of persons living with HIV infection in Cuba has certainly contributed to the effective control of the HIV epidemic in that country.

Table 1: Adult HIV prevalence in selected Caribbean countries

Country	Adult HIV prevalence
Guyana	2.4%
Haiti	2.2% (DHS)
Bahamas	> 2 %
Trinidad and Tobago	> 2%
Suriname	1.9%
Jamaica	1.5%
Barbados	1.5%
Dominican Republic	1.1% (DHS)
Cuba	< 0.2%

Source: Caribbean Technical Expert Group 2004, UNAIDS 2006, Demographic Health Surveys (DHS)

Both Haiti and the Dominican Republic (DR) have conducted demographic health surveys that have included population-based samples on whom HIV testing was conducted (5). Their estimates of adult HIV prevalence (DR 1.1%, Haiti 2.2%) are relatively robust. Most of the other Caribbean countries estimate their adult HIV prevalence based on surveillance of pregnant women. A summary of estimates of HIV rates among pregnant women in different Caribbean countries is shown in Table 2. The surveys on

Table 2: HIV prevalence among pregnant women

Country	Prevalence	Year
Bahamas	3.0%	2002
Barbados	0.6%	2003
Belize	2.5%	2005
Cuba	0.0-0.4%	2000
Dominican Republic	2.0%	2002
Guyana	5.0%	2002-2003
Haiti	3.4%	2003-2004
Jamaica	1.5%	2005
Suriname	1.7%	2005
Trinidad and Tobago	1.2%	2002

Source: Caribbean Technical Expert Group 2004, UNAIDS 2006

which these HIV rates are based are not strictly comparable and knowledge of the specific country context is important in interpreting the results. For instance, in Jamaica, the rate of 1.5% is based on sentinel surveillance among pregnant women attending public clinics. HIV rates among pregnant women seeking private care (approximately 25% of total antenatal visits) are significantly lower. However, 1.5% is assessed as being a reasonable estimate of the HIV prevalence rate in the adult population in Jamaica. The HIV rates in pregnant women reported for the Dominican Republic and Haiti are higher than the HIV rates found among the adult population based on their demographic health surveys.

Several Caribbean countries have shown a decline in HIV prevalence rates among pregnant women in recent years. In Haiti, the HIV rate among pregnant women declined from 6.0% in 1996 and 5.1% in 2000 to 3.4% in 2004 (4). In the Dominican Republic, HIV prevalence among antenatal clinic attendees aged 15–24 years was 0.5% in 1992, peaked at nearly 3% in 1995 and declined to 1.5% in 1998 and 0.5% in 2000. The rate of 2% reported in 2002 in Table 2 may refer to the HIV rate among all antenatal clinic attendees. In the Bahamas, HIV rates among pregnant women declined from 4.8% in 1993 to 3.0% in 2002. The rates in Barbados also appear to have declined while in Jamaica the HIV rates among pregnant women have been stable at approximately 1.5% since 1998. Thus, the data appear to indicate a slowing or stabilizing of the HIV epidemic in some Caribbean countries and probably a decline in a few countries such as the Bahamas and Haiti. In the Bahamas where the HIV epidemic was initially fueled by a crack/cocaine epidemic (6), new HIV infections have declined by over a half since 1994. However, the data to make a proper assessment of HIV trends are not available in most Caribbean counties.

While HIV rates among the general population in the Caribbean appear to have stabilized at levels significantly below those found in sub-Saharan Africa, surveys among vulnerable populations indicate HIV infection rates that are disturbingly high. Among female commercial sex workers (CSW) in the Dominican Republic, HIV rates in 2000 ranged from 4.5% to 12.4% [Table 3] (4). HIV rates among CSW in

Table 3: HIV prevalence among female sex workers

Country	City	Prevalence	Year
Dominican Republic	La Romana	4.5%	2000
Dominican Republic	St Domingo	9.5%	2000
Dominican Republic	Bani	12.4%	2000
Guyana	Georgetown	30.6%	2000
Jamaica	Kingston	9.0%	1997
Jamaica	Kgn and Mobay*	9.0%	2005
Suriname	Paramaribo	21.0%	2003

*Kgn and Mobay = Kingston and Montego Bay
Source: Caribbean Technical Expert Group 2004, UNAIDS 2006

Jamaica appear to have remained stable between 1997 and 2005 at 9%. Surveys conducted in Paramaribo, Suriname and Georgetown, Guyana have found HIV rates among CSW as high as 46% (1997) (7) and 30.6% [2000] (8), respectively. Clearly, more effective means need to be found to reduce HIV infection rates among CSW.

HIV rates among MSM appear to be high in the Caribbean although there are only a limited number of surveys reported in the literature [Table 4] (4). In the Dominican Republic, two surveys found HIV rates of 7.7% (1994) and 11.7% (1996). HIV rates among MSM appear to be higher in Suriname (18% in 1998) and Jamaica (33.6% in 1996). Due to the strong stigma associated with male homosexuality in the Caribbean, many MSM are not readily identified or reached by regular public health services. Special measures need to be taken by health authorities to build bridges with the MSM community and empower them to promote safe sex and reduce HIV infection rates.

Table 4: Prevalence among men who have sex with men

Country	City	Population	Prevalence	Year
Cuba	National	Contacts	5.2%	1986–88
Dominican Rep	St Dominica	Bisexual	7.7%	1994
Dominican Rep	St Dominica	Homosexual	11.7%	1996
Jamaica	Kingston	Homosexual	33.6%	1996
Jamaica	Kingston	Homo-bisexual	9.6%	1985–86
Suriname		Homosexual	18%	1998

Source: Caribbean Technical Expert Group 2004, UNAIDS 2006

Data on HIV rates among other vulnerable populations in the Caribbean are scarce. A survey of female substance abusers in Trinidad and Tobago found that 24 of 122 (19.7%) were HIV-infected (9). A survey of persons admitted to the rehabilitation unit of the University Hospital of the West Indies, Kingston, Jamaica, between 1991 and 2003 found 45 of 978 (4.6%) to be HIV-positive (10). Crack/cocaine use was an important risk factor driving the HIV epidemic in the Bahamas in the early 1990s (6). In Jamaica, 8.3% of reported AIDS cases admit to crack/cocaine use (3) although well under 1% of the adult population report ever using it (11). In the Caribbean, HIV rates are particularly high among CSW who use crack/cocaine (8, 9, 12, 13).

Among persons attending public clinics for the treatment of sexually transmitted infections (STI), HIV rates are generally high. For instance, among STI clinic attendees in Jamaica, HIV rates increased steadily to peak at 7% in 1999 and then declined to approximately 3.6% in 2007 (3, 14). Surveys in Guyana and Trinidad and Tobago have shown similar or higher HIV rates at public STI clinics. Prison inmates are also considered to be at higher risk of HIV infection. Previous surveys found high rates of 6% and 12% (14). A survey of 118 street persons in Jamaica, St Lucia and Trinidad and Tobago found self-reported HIV rates of 7%, 12% and 34%, respectively (12).

Overall, HIV surveillance data are generally limited in the Caribbean though there are enough studies to have a fair picture of the general scope of the epidemic. In many Caribbean countries, HIV rates in the general population appear to have stabilized and in a few countries such as the Bahamas, Bermuda and Haiti, HIV rates may have declined in recent years. Among vulnerable populations such as CSW, MSM, substance abusers and others, HIV rates are unacceptably high and could provide a reservoir for further and increased HIV spread among Caribbean people.

The Regional Response to the HIV Epidemic

The Caribbean Community (CARICOM) Heads of Government declared AIDS to be a regional priority at their meeting of 2001 in the Nassau Declaration on Health. The Pan-Caribbean Partnership against AIDS (PANCAP) was established within CARICOM in 2001 to lead the regional response to the HIV epidemic. A Caribbean Regional Strategic Framework (CRSF) 2002–2006 was prepared and significant funds were raised by PANCAP to support the regional response including grants from the European Union, World Bank and Global Fund as well as other international donors (Table 5). PANCAP has grown to include over 80 partners – Caribbean countries, regional organizations, AIDS associations and NGOs representing all sectors of Caribbean society as well as UN agencies and international donors. A smaller representative group of PANCAP chaired by the Minister of Health who chairs The Council for Human and Social Development (COHSOD) meets twice annually as the Regional Coordinating Mechanism (RCM). A review of PANCAP's first five-years is currently underway and a new Caribbean Regional Strategic Framework to guide the regional HIV response is being prepared.

Table 5: International funding commitment to the Caribbean, 2001–06

	US$ million	%
Global Fund for AIDS, TB, Malaria	223.1	44
World Bank	141.4	27
PEPFAR	89.6	17
Bilateral Agencies	49.2	9
UNAIDS	14.9	3

TB = Tuberculosis
Source: UNAIDS 2006

Most Caribbean countries developed a response to the HIV epidemic several years before the formation of PANCAP. In fact, some countries such as the Bahamas, Barbados, Bermuda, Cuba and Jamaica have had comprehensive HIV control programmes for 15–20 years. However, when the World Bank began providing HIV loans in the Caribbean and the Global Fund was established considerably more funds became available to countries to support a heightened multi-sectoral response. Government leaders have also become more conscious of the significant danger that the HIV epidemic poses with respect to its potential to seriously undermine development. Guyana and Haiti have also received support from the USA President Emergency Plan for AIDS Relief (PEPFAR).

Achievements of National HIV Programmes

Most Caribbean countries have introduced programmes to prevent HIV transmission from mother-to-child through HIV testing of pregnant women and provision of antiretroviral therapy (ART). Countries like the Bahamas and Barbados were among the first to show dramatic declines in HIV infection among infants born to HIV-positive women (4, 15). Global Fund grants have enabled many Caribbean countries to establish public access programmes to antiretroviral therapy (ART). Several countries have shown a dramatic decline in mortality due to AIDS and Haiti has documented the impressive impact of their HIV treatment programme (16–18). HIV testing and counselling is also widely available throughout the Caribbean although many persons remain reluctant to access these services out of fear of testing positive and the continued strong stigma associated with HIV in the Caribbean.

Awareness of HIV/AIDS and how it is prevented is generally high throughout the Caribbean. Of course, it is well recognized that awareness or knowledge of HIV and how it is transmitted does not of itself lead to the practice of safe sex. Despite the high awareness of HIV, many in-school youth do not know the ABCs of HIV prevention. Moreover, a variety of myths concerning HIV and HIV transmission remain strong among significant numbers of Caribbean people and impede the practice of safe sex (19, 20). Some persons still believe that they can identify whether someone is HIV-infected by looking at them or by the odour of their genital secretions during foreplay prior to sexual intercourse. Many persons believe that if the man does not ejaculate within the vagina, HIV infection will not be transmitted. Belief that the mosquito can transmit HIV also remains strong in some sectors of the population.

HIV-education and prevention programmes throughout the Caribbean have contributed to increase condom distribution and sales in all countries where surveys have been conducted. For instance, condom distribution and sales in Jamaica increased from approximately 2.5 million condoms in 1985 to approximately 10 million annually since 1995 (14). The proportion of condoms sold increased from 30% to 70% during the same period. The proportion of men aged 15–49 years reporting condom use at last sex with a non-regular partner in Jamaica has been approximately 75% since 1992, based on periodic national KAP surveys with population based samples (14). Among women aged 15–49 years, reported condom use at last sex with a non-regular partner increased from 37% in 1992 to 73% in 1996 and declined somewhat to 66% in 2004. These data suggest that the behaviour change communication programmes in Jamaica have contributed to sustained safer sex-behaviour among the majority of the adult population. At the same time, a significant proportion of persons (approximately 25% of men and 34% of women in 2004) are at risk of HIV infection due to failure to use condoms with a non-regular sexual partner.

Behaviour surveillance surveys in six Eastern Caribbean countries (Antigua and Barbuda, Dominica, Grenada, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines) conducted in 2005 – 2006 found that the majority of adults reported the use of a condom the last time they had sex with a non-marital non-cohabiting sexual partner (21) though the rates were not as high as those found in Jamaica (14). Among persons aged 25–49 years who had a non-regular non-commercial sex partner in the past 12-months, self-reported condom use at last sex with a non-regular partner ranged from 52% in St Kitts and Nevis to 67% in St Lucia. Among those aged 15–24 years, rates of condom use were higher ranging from 55% in St Lucia to 73% in Dominica. These samples were population based. Among taxi drivers in these six countries, based on a convenience sample, last time condom use with a non-regular partner was 59%. A convenience sample of in-school youth aged 10–14 years in these countries found that condom use at last sex among those who were sexually active was 39% (21). Thus, significant numbers of youth and adults throughout the Caribbean remain at risk of HIV infection despite HIV education and prevention programmes.

Sexual patterns and Social Vulnerability

Sexual patterns in the Caribbean contribute to the continued spread of HIV among the people. Sex begins at an early age with between 22% to 32% of persons in the six Eastern Caribbean States reporting having sex before 15 years of age. Multiple sexual partners (two or more sex partners in the past year) is relatively common throughout the Caribbean especially among the youth and men (11, 21). Gender roles and stereotypes play an important part in influencing sexual behaviour and a reluctance to use condoms with a steady partner puts many persons especially women at risk of HIV infection (22). Commercial sex is readily available in most Caribbean countries and appears to be taking more diverse forms. However, transactional sex (sex in exchange for social support, school fees, food, a gift, *etc*) is fairly common – 20% of adults in one survey in Jamaica – and places persons at-risk because consistent condom use is less likely in these relationships (23, 24). Age mixing between an older man and a younger female is frequently a feature of these transactional relations and may explain why significantly more teenage girls than teenage boys are HIV-infected in the Caribbean.

While these sexual patterns are seen across all social strata in the Caribbean, many persons are at increased risk of HIV infection due to their social vulnerability arising from poverty, illiteracy or limited education, unemployment, gender inequity and sexual orientation. Many of these persons do not have the knowledge, skills, self-esteem or motivation to negotiate safe sex and consistent condom use with their sexual partner(s). The strong stigma associated with HIV/AIDS, commercial sex and same sex behaviour among men compounds the problem by driving the HIV epidemic underground and making access to prevention and social support services more difficult (25). Many MSM develop sexual relations with women who are unaware of their sexuality in an effort to disguise their same sex behaviour and avoid the strong social stigma associated with male homosexuality. This behaviour acts as a bridge for HIV transmission from the gay community, where HIV rates are high, to the general population.

Challenges

The challenges facing Caribbean countries in mounting an effective response that will control the HIV epidemic are not limited to the sexual patterns, social vulnerability and strong stigma associated with HIV and MSM. Most Caribbean countries have weak national capacities to address their HIV epidemic (26). Even where comprehensive control programmes are in place, these programmes are frequently highly dependent on project funds and need to be properly institutionalized to ensure sustainability including the

establishment of HIV posts in the Government sector. In most countries, there has been little progress in repealing outdated legislation (*eg* sodomy laws) or updating legislation such as Public Health laws or regulations or elaborating new legislation. Some countries have written HIV policies that affirm the rights of persons living with HIV including their right to work and not be discriminated against. However, these policies are usually not underpinned by legislation.

Stigma associated with HIV remains strong in the Caribbean though there appears to be fewer reports of outright discrimination than in the early years of the epidemic. The survey conducted in six Eastern Caribbean countries found a compassionate response by individuals if a family member were HIV positive (21). Most persons were willing to allow a HIV-positive student, teacher or co-worker to continue normal school activities. However, low willingness for food-related contact may reflect persistent fear of HIV transmission through food. These findings are consistent with other surveys and anecdotal experience elsewhere in the Caribbean.

The technical capacity to manage HIV programmes and deliver high quality prevention programmes to vulnerable populations and young people is a major challenge in many Caribbean countries. There are no regional institutions training persons adequately with the full range of skills needed to lead these programmes. While the health sector has generally been able to integrate antiretroviral treatment and mother-to-child HIV-prevention programmes, other sectors appear to be challenged with how best to mount an effective sectorwide response to the HIV epidemic. This is particularly critical in the education sector which finds it very difficult to institutionalize meaningful sex-education and HIV/STI prevention programmes for school children many of whom are sexually active (27). The tourism sector remains hesitant to make appropriately packaged condoms available in hotel rooms. Many NGOs have good links with vulnerable populations and show strong commitment to HIV prevention and care but lack the resources or capacity to sustain effective programmes. On the other hand, in Haiti, the government health sector is weak and a few NGOs have led the response to their HIV epidemic. Throughout the region, there is a need to strengthen the multi-sectoral response to HIV in order to reduce HIV spread and promote development.

The challenges faced by Caribbean countries in implementing an effective multi-sectoral response to the HIV epidemic is compounded by the uncoordinated and fragmented efforts of the different regional, UN and other international entities seeking to lead various aspects of the response, or provide funding and/or technical assistance. Despite the commendable development of PANCAP and its success in mobilizing resources to support the regional response, there is limited coordination among the critical regional organizations leading or supporting the HIV response. The PANCAP Secretariat has lacked the technical capacity to lead the regional response while the role of CAREC has been undermined by PAHO's recent decision to remove the HIV/ STI unit from CAREC and establish it as a separate entity. The availability of HIV project funding has encouraged the formation of several regional organizations empowering dif-ferent sectors. However, there is currently no mechanism for effective coordination among these different organizations nor is there any entity or combination of entities that provides a clear leadership direction for the countries and numerous regional players.

The preparation of a new HIV strategic framework by PANCAP offers an opportunity to help address these challenges and to develop a more coordinated and effective regional response to the HIV epidemic. In order to achieve this goal, a number of critical actions are required. Caribbean governments need to be more proactive at regional level to develop policies that countries can adapt and implement to ensure a more supportive environment for an effective HIV response. For instance, a policy mandating sex and HIV education in schools, including condom skills and access to contraceptives would facilitate HIV/STI prevention programmes among Caribbean youth. The Governments need to formally commit to the goal of universal access to HIV prevention, treatment and care and phase in the establishment of posts and staff to sustain programmes over the long term. In many instances, the health and social infrastructure to support HIV and other health programmes needs to be strengthened including an increase in the number of well-trained public health leaders and managers. Caribbean regional health institutions need to be reoriented and strengthened in order to address current health needs including HIV, the chronic non-communicable diseases and mental health.

Towards Universal Access

The new Caribbean Regional Strategic Framework (CRSF) for HIV needs to harmonize regional and PANCAP goals with country programme goals and set specific targets for universal access to prevention, treatment and care of HIV. This requires assessing the current HIV status and programmes of countries; having one regional plan, the CRSF, that guides all countries, regional organizations and partners; and having one set of key indicators with which to monitor progress. Improving communication and coordination among the main regional organizations and the countries is essential. The lead agencies such as CARICOM/PANCAP, UNAIDS, PAHO, CAREC and other organizations such as the UN agencies, CCNAPC, CRN^{+} need to better coordinate, integrate and streamline their activities so that there are fewer, better planned regional meetings and activities that provide more tangible support to countries.

The regional response needs to focus on promoting a favourable policy and legislative environment, mobilizing resources, coordination as well as facilitating technical assistance and support for countries. PANCAP, in particular, can

play a critical role among Caribbean governments through advocacy for sustainable HIV programmes, progressive policy and legislative reform and stigma reduction programmes such as champions for change. However, the CARICOM/PANCAP secretariat and the CARICOM health desk will both need to be strengthened and work more closely together. PANCAP needs to integrate their separate HIV projects into one programme and reduce their role in the implementation of project activities.

An effective response to the HIV epidemic in the Caribbean depends primarily on the commitment, capacity and leadership at the national level. Hence, there needs to be a coherent strategic approach by the countries and the region to build the capacity of the national HIV/STI programmes. This in turn is linked to the need to strengthen public health leadership training including the establishment of a doctorate in public health at the University of the West Indies. More attention must be given to improving the technical quality of programmes through technical assistance that supports the development of local staff. At country level, HIV programmes need to be institutionalized by integrating them within health and other sectors. Thus the need to create additional public health posts at all levels.

Reducing stigma and discrimination associated with HIV throughout the Caribbean is critical for achieving universal access to prevention, treatment and care of HIV (25). Recounting horror stories of HIV discrimination in the past will not achieve this end. HIV programme managers and leaders of government and civil society must act decisively to intervene whenever instances of discrimination arise. We need to model and promote examples of persons living with HIV interacting normally with others as well as our leaders at all levels of society showing that they care. The "getting on with life" anti-stigma campaign in Jamaica featuring Ainsley and Annesha, two persons living with AIDS, is a good example of a campaign that helps to overcome stereotypes and reduce stigma. However, many more persons living with HIV need to disclose to their families, friends, neighbours and co-workers in order to really put a face on the epidemic and drive home the point that people we know, who are just like us, are getting HIV/AIDS.

A much greater challenge than reducing HIV stigma will be to reduce the stigma associated with homosexuality, prostitution and crack/cocaine use (23). Caribbean society appears more comfortable assessing these realities in Old Testament biblical terms rather than from a public health and human rights perspective. Men who have sex with men, sex workers and drug abusers are on the margins of society and are involved in illegal activity given the laws in most Caribbean countries. Decriminalization of MSM or sex-work is viewed by many as promoting immorality. Political leaders shy away from progressive policies that affirm human rights and facilitate public health when MSM or sex-workers are involved. This maintains the stigma associated with these groups, reduces access to services, drives the HIV epidemic underground and promotes spread of HIV. The irony is that there are a few Caribbean countries that do take a more enlightened approach to these issues but the political leaders lack the courage or conviction to explore and adopt these approaches.

Achieving universal access to ARV treatment is certainly feasible in the Caribbean as is reducing HIV transmission from pregnant mothers to their newborn infants. In most of the countries, resources are available through Global Fund or PEPFAR grants, or the World Bank, to roll out these programmes primarily through integration and strengthening of current health services. A major challenge is identifying the many persons living with HIV who are unaware of their infection. This requires a significant increase in HIV-testing in a variety of settings. Most Caribbean countries offer routine HIV-testing to pregnant women. However, routine opt out HIV-testing should also be offered to persons presenting with a sexually transmitted infection and to all adults on hospital admission and during their annual medical examination. This will facilitate early identification of persons living with HIV and ensure that they have access to ARV treatment as soon as it is indicated.

Current coverage data of persons in the Caribbean with advanced HIV infection on ARV therapy or pregnant women receiving ARV prophylaxis are not readily available. The UN General Assembly Special Session (UNGASS) country reports for 2006–2007 are not yet available and the compilation of the Caribbean country reports for 2004–2005 undertaken by UNAIDS is now outdated (28). Several countries have made good progress in recent years. For instance, coverage of pregnant women in Jamaica has increased from 47% in 2004 to 88% in 2007 while ARV therapy coverage increased from 50% in 2005 to 60% in 2007 despite an increase in the target population (3, 28). Many of the Caribbean countries have relatively good health services and this has facilitated the roll out of these programmes. However, even in countries where the health infrastructure is not well developed, such as Haiti, significant progress is being made though coverage levels still need to be increased further. However, there are anecdotal reports from several countries that many persons living with HIV present for treatment very late due to the strong stigma associated with AIDS. Ensuring adherence to ARV therapy is also a major challenge though the majority of patients do adhere to therapy well.

Persons living with HIV, including those on ARV therapy, must be counselled to practice safe sex. This is known as "positive prevention" as it helps to break the chain of HIV transmission and reduce new HIV infections. In several countries, a number of women with HIV have repeat pregnancies. Hence the importance of counselling persons living with HIV to use dual methods *ie* use of both a condom and an effective family planning method.

Achieving universal access to HIV prevention in the Caribbean will require a significant increase in the scope, quality and coverage of HIV-prevention services and pro-

grammes. One study in Jamaica conducted in 2004 showed the need for a ten-fold increase in prevention programme coverage and resources (29). Preventing new HIV infections is made more difficult by the strong stigma associated with HIV and those who are most vulnerable such as MSM, CSW and drug abusers. The failure of our leaders to elaborate policies that will provide a more supportive environment and facilitate prevention programmes for these vulnerable populations is also a problem.

Despite these challenges, there is an urgent need to expand prevention programmes especially among the youth and the vulnerable populations. In the Caribbean, most young people are in school and this is the best way to reach them with HIV/STI and sex-education (27). The education sector has generally been slow and ineffective in addressing this need and is hampered by the failure of clear policies and decisive leadership as well as limited resources. PANCAP needs to take on this issue at the regional level as a priority. The youth also have to be reached in other settings and there need to be special programmes targeted at out-of-school youth, but we are failing to reach most of the children in school with meaningful prevention programmes.

Targeted outreach programmes with vulnerable populations need to be expanded to ensure full coverage. Many HIV programmes have no estimate of their target populations and are only reaching a small percentage of those most at risk. Expanding HIV-testing with appropriate counselling among vulnerable groups may also contribute to reducing the number of new infections. However, achieving behaviour change and safe-sex among these marginalized groups is not easy and requires consistent, creative engagement over the long term. Empowering influential peers among these groups in order to sustain safe-sex behaviour is important.

Prevention programmes also need to target vulnerable communities and sites where persons go to meet new sex partners. Surveys show that these sites are not restricted to night clubs and bars, but include a wide variety of locations including malls, fast food venues, taxi stands, parks and even churches (30). Prevention programmes also need to address the workplace with special attention to targeting those who are at greater risk. Achieving universal access requires an effective multi-sectoral approach in which all sectors take responsibility for developing and implementing HIV policies and programmes specifically adapted to the needs and circumstances of their sector.

A variety of different HIV prevention approaches have been taken in the Caribbean with only limited documentation (14). Drama, music and dance are frequently used to communicate the educational message (sometimes referred to as "edutainment") as are games and competitions. Community educators and peer educators have been trained and deployed in most Caribbean countries. However, few of these approaches have been adequately assessed and there has been limited sharing and replication of best practices. The capacity to evaluate and document these prevention programmes needs to be strengthened. Indeed, there is a need to strengthen the capacity to monitor and evaluate HIV programmes and conduct research throughout the Caribbean.

CONCLUSION

Caribbean countries have worked hard to control the HIV epidemic. However, much more needs to be done to control HIV spread and reduce new HIV infections. The development of a new Caribbean Regional Strategic Framework for HIV by PANCAP is an important opportunity to forge greater unity and leadership at regional level to support Caribbean countries achieving universal access to HIV prevention, treatment and care.

REFERENCES

1. Joint United Nations Programme on HIV/AIDS (UNAIDS)/World Health Organization (WHO). AIDS epidemic update Dec. 2007. Geneva 2007.
2. Caribbean Epidemiology Centre (CAREC). *www.carec.org.*
3. National HIV Programme, Jamaica Country Progress Report to the Secretary General of the United Nations on the United Nations General Assembly Special Session, January 2006 – December 2007.
4. Strengthening the Caribbean Regional Response to the HIV Epidemic. Report of the Caribbean Technical Expert Group Meeting on HIV Prevention and Gender October 28-29, 2004. UNAIDS document, 2004.
5. Demographic health surveys in Haiti 2005 and Dominican Republic 2002. *www.measuredhs.com/.*
6. Gomez MP, Kimball AM, Orlander H, Bain RM, Fisher LD, Holmes KK. Epidemic crack cocaine use linked with epidemics of genital ulcer disease and heterosexual HIV infection in the Bahamas: Evidence of impact of prevention and control measures. Sex Transm Dis 2002; **29:** 259–64.
7. Persaud NE, Klaskala W, Tewari T, Shultz J, Baum M. Drug use and syphilis. Co-factors for HIV transmission among commercial sex workers in Guyana. West Indian Med J 1999; **48:** 52–6.
8. Allen CF, Edwards M, Williamson LM, Kitson-Piggott W, Wagner H-U, Camara B et al. Sexually transmitted infection service use and risk factors for HIV Infection Among Female Sex Workers in Georgetown, Guyana. JAIDS 2006; **43:** 96–101.
9. Reid SD. HIV Seroprevalence and risk factors in female substance abusers seeking rehabilitation in Trinidad and Tobago. West Indian Med J 2004; **53:** 155–8.
10. De La Haye W, Powell K, Pinnock S, Panton M. Profile and pattern of substance abuse in clients diagnosed with HIV in a substance abuse treatment unit in a General Hospital in Jamaica. West Indian Med J 2004; **53 (Suppl):** 35.
11. Figueroa JP, Ward E, Walters C, Ashley DE, Wilks RJ. High risk behaviour among adult Jamaicans. West Indian Med J 2005; **54:** 70–6.
12. Day M, De La Haye W. A comparison of primary health care needs of street, out-of-treatment drug using individuals in three Caribbean islands. West Indian Med J 2006; **55 (Suppl 2):** 34.
13. De Gourville EM, Mahey D, Quigley M, Jack N, Mahabir B. Risk factors for concordant HIV infection in heterosexual couples in Trinidad. Int J STD and AIDS 1998; **9:** 151–7.
14. Figueroa JP. An overview of HIV/AIDS in Jamaica: Strengthening the response. West Indian Med J 2004; **53:** 277–82.
15. St John AM, Kumar A, Cave C. Reduction in perinatal transmission and mortality from human immunodeficiency virus after intervention with Zidovudine in Barbados. Pediatr Infect Dis J 2003; **22:** 422–5.
16. Severe P, Leger P, Charles M, Noel F, Bonhomme G, Bois G et al. Antiretroviral therapy in a thousand patients with AIDS in Haiti. New Engl J Med 2005; **353:** 2325–34.

17. George E, Noel F, Bois G, Cassagnol R, Estavien L, Rouzier Pde M et al. Antiretroviral therapy for HIV-1-infected children in Haiti. J Infect Dis 2007; **195:** 1411–8.
18. Wolf LL, Ricketts P, Freedberg KA, Williams-Roberts H, Hirschhorn LR, Allen-Ferdinand K et al. The cost-effectiveness of antiretroviral therapy for treating HIV disease in the Caribbean. J Acquir Immune Defic Syndr 2007; **46:** 463–71.
19. Figueroa JP. Myths, beliefs, taboos: current attitudes towards HIV/AIDS. CAJANUS 1996; **29:** 53–61.
20. Hutchinson MK, Jemmott LS, Wood EB, Hewitt H, Kawha E, Waldron N et al. Culture-specific factors contributing to HIV risk among Jamaican adolescents. J Assoc Nurses AIDS Care 2007; **18:** 35–47.
21. Behaviour Surveillance Surveys in Six Countries of the Organization of Eastern Caribbean States (OECS) 2005. CAREC/PAHO. *www.carec.org.*
22. Figueroa JP. Understanding Sexual Behaviour in Jamaica (Chapter) In Press.
23. Hope Enterprises. National KAP Survey 2004. Kingston, Jamaica. *www.jamaica-nap.org/nationalKABPreport2004%20Final.pdf.*
24. Rolfe B, Hemmings J, Morris TA, Samuels-Dixon V. Young Women and sexual relationships in Kingston, Jamaica. Options Consultancy Services and Hope Enterprises Ltd July 2007.
25. Hackett V (Ed). Champions for Change – Reducing HIV/AIDS stigma and discrimination in the Caribbean. CARICOMA/PANCAP 2005.
26. Figueroa JP. HIV/AIDS in the Caribbean: The need for a more effective public health response. West Indian Med J 2003; **52:** 156.
27. Figueroa JP. The Challenge of Sexually Active School Children in the Caribbean in the era of HIV/AIDS (Chapter) In Press.
28. UNAIDS. Keeping Score: AIDS Responses in the Caribbean. UNAIDS 2007.
29. Estimated Resource Needs for the Jamaica National HIV/AIDS/STI Strategic Plan. Ministry of Health, Jamaica document, 2004.
30. Figueroa JP, Dolan CB, Dale D, Hileman SB, Weir S. An assessment of sites where persons go to meet sexual partners in St James, Jamaica, using the PLACE method. Sex Transm Dis 2007; **34:** 410–5.