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This paper presents a detailed review of the Trinidad and Tobago HIV/AIDS National Strategic Plan 2004-2008 (NSP), over the period 2004 to 2010. The NSP was developed to initiate an expanded response to the disease as well as to function as a decisive intervention in reducing the incidence and prevalence of the disease. The reality is that the NSP was developed within the context of the potential threat of HIV and AIDS to the socioeconomic base. The Plan was resourced based on the results of analyses which argued that the benefits of implementing the Plan outweighed the cost of so doing. This paper addresses the question of whether it made socioeconomic sense to invest the level of resources that were allocated to the HIV/AIDS NSP over the period 2004-2008.
The assessment included an evaluation of the costs and consequences of the interventions. Additionally, a comparison of the goals and objectives of the NSP and the actual results achieved was undertaken, so as to determine the impact of the plan.

The results show that the NSP achieved some of its objectives, particularly in the priority area of prevention. However, closer analyses indicate that the NSP was formulated against a weak health system platform, which proved to be a major challenge. In light of the challenges encountered in achieving the objectives, it is recommended that health sector reform measures be implemented to further curb the spread of HIV/AIDS in Trinidad and Tobago.

**Keywords:** HIV/AIDS; National Strategic Plan; Trinidad and Tobago; Socioeconomic Assessment.

**Introduction**

HIV/AIDS poses a serious threat to the Republic of Trinidad and Tobago, not only because of its social effects on the health of the population, but also because of its potentially devastating economic impact (Camara, Russell-Brown, Henry et al. 2001). Since the first case of HIV/AIDS was recorded in Trinidad and Tobago in 1983 and up to 2004, a number of interventions were implemented. However, many of these interventions were arguably short-sighted and uncoordinated which in turn stymied their potential impact (HEU 2001). As a result, they failed to achieve many of their planned objectives. A cross-cutting challenge to most of those interventions was the lack of effective monitoring and evaluation. A further concern, of almost equal weighting, was the incompatibility of some interventions with the socioeconomic and cultural environment.

In light of these shortcomings, the first *Five-Year National HIV/AIDS Strategic Plan for Trinidad and Tobago* was developed for the period January 2004 to December 2008 and aimed to provide a comprehensive response to the disease. The NSP was guided by “...the principles of inclusion, sustainability, accountability and respect for human rights” (Office of the Prime Minister 2003: 17). The main objective of the NSP was to build on existing programmes and initiatives in an attempt “...to reduce the incidence of HIV infections in Trinidad and Tobago (as well as) to mitigate the negative impacts of HIV/AIDS on persons infected and affected in Trinidad and Tobago” (Office of the Prime Minister 2003: 16).

A multisectoral approach involving a collaborative response by both the private and public sectors on five priority areas was identified as necessary for achieving the NSP’s outlined goals. These five priority areas were: prevention; treatment, care and support; advocacy and human rights; surveillance and research; and programme management, coordination and evaluation.

The objective of this paper is to assess the effectiveness of the NSP in combating HIV/AIDS in Trinidad and Tobago.
Literature Review

The Trinidad and Tobago NSP was designed and implemented against the backdrop of the UNAIDS’ warning that, “...While it is difficult to predict the future spread of the epidemic, the impact in terms of morbidity and mortality in the next decade is clear. In the absence of effective treatment and care, an additional 15 million people currently infected with HIV will develop AIDS and die in the next five years” (UNAIDS 2001).

Globally there were an estimated 34 million individuals living with HIV in 2010, 2.7 million new infections and 1.8 million deaths due to AIDS in the same year (WHO et al 2011). The Caribbean has the second highest adult HIV prevalence rate in the world (1%) following Sub-Saharan Africa where the rate is 5%. There are an estimated 200,000 persons living with HIV in the Caribbean, 70% of whom reside in Haiti and the Dominican Republic. In 2010, approximately 12,000 persons in the Caribbean were newly infected with HIV and 9,000 persons died from AIDS-related causes (WHO et al 2011).

While the HIV/AIDS situation in the region may appear to be severe, a number of improvements have occurred over the course of the last decade (2001-2010) and should be noted. To begin with, there has been a one-third decline in the number of persons newly infected with HIV over the stated period from 19,000 to 12,000. The number of persons living with HIV has also exhibited a slight decrease from 210,000 to 200,000. The number of persons dying from AIDS-related causes has also fallen significantly from 18,000 to 9,000; a 50% decline. This can be attributed to increased access to Antiretroviral (ARV) therapy. The reduction in HIV incidence coupled with increased access to Prevention of Mother-to-Child Transmission (PMTCT) services has resulted in a 60% decrease (2,900 to 1,200) in the number of children that are newly infected with HIV as well as a 47% decrease (1,900 to 1,000) in the number of children dying from AIDS-related causes between 2001 and 2010 (WHO et al 2011).

The first case of HIV/AIDS was detected in Trinidad and Tobago in 1983. Almost three decades later, the total number of confirmed HIV cases stands at 20,255 while the number of AIDS cases and AIDS-related deaths stand at 6,208 and 3,845 respectively (NACC 2010). In addition, there has been a minor increase in the HIV prevalence rate in Trinidad and Tobago from 1.2% in 2006 to 1.5% in 2009 (NACC 2010). This rate is expected to increase even further to 2% by 2015 partly as a result of improvements in treatment services (Fearon, Kollipara and Pratt 2010). It should also be noted that the number of new infections has levelled off to an estimated 1,400 annually (NACC 2010). While the data presented above is valuable, it is believed that the actual number of HIV-infected persons in Trinidad and Tobago is greatly underestimated due to a number of factors including stigma and discrimination (CAREC 2004; NACC 2010).

Heterosexual activity has been recorded as the primary mode of HIV transmission in Trinidad and Tobago as well as a number of other Caribbean countries. When disaggregated by age and sex it was found that most of the new female HIV positive cases occurred among the 20-24 age group while most of the new male HIV positive cases occurred among the 45-49 age group (NACC 2010). As at 2009, it was observed that 76% of all new HIV positive cases occur within the 15 to 44 age group (NACC 2010). Nicholls et al (1998) projected that if nothing was done to
cure this HIV/AIDS trend among the working age population by 2005, HIV/AIDS would have reduced the labour supply by 5.2%, with a consequential reduction of national savings by 10.3% and investment by 15.6%. These are important variables in determining long term economic growth and of great significance is the opportunity cost of treating an HIV/AIDS patient. In the absence of HIV/AIDS, it is argued that these financial resources could have been put towards more productive activities in the country.

**Methodology**

Drummond et al (1997) define economic evaluation as the comparative analysis of alternative courses of action in terms of both their costs and consequences. There are four main methods of economic evaluation that can be utilized to appraise health care programmes namely: cost-minimisation analysis (CMA); cost-effectiveness analysis (CEA); cost-utility analysis (CUA); and cost-benefit analysis (CBA). Economic evaluation deals with both inputs and outputs, that is, the costs and consequences of activities. For the purposes of this paper, we conduct a review of the Trinidad and Tobago National HIV/AIDS Strategic Plan 2004-2008 focusing on the cost of implementing the Plan, the resultant outputs compared to articulated targets. The costs and consequences of the proposed interventions were evaluated and the goals and objectives outlined in the NSP were compared to the actual results to determine whether the plan did in fact achieve its stated goals. The assessment was conducted by examining each of the five priority areas paying particular attention to the strategic objectives and the expected outcomes and evaluating whether these targets were met in an effective and efficient manner. Secondary data was also collected to help improve the understanding of the issue of HIV/AIDS in Trinidad and Tobago.

**Results**

The targets/expected outcomes and actual achievements under each of the five priority areas of the NSP will now be presented in tabular format.

**Prevention**

Priority Area I focused on the dissemination of information to the general population on HIV/AIDS and approaches to prevent infection. Six (6) strategic objectives were identified: (i) the promotion of safe and healthy sexual behaviours among the general population; (ii) the promotion of healthy sexual attitudes, behaviours and practices among vulnerable and/or high-risk groups; (iii) reduction in the rate of Mother-to-Child-Transmission (MTCT); (iv) increase in the population’s knowledge of sero-status; (v) reduction in the possibility of post-exposure infection; and (vi) improvement in the management and control of conventional sexually transmitted infections (CSTIs). Table 1 details the targets and expected outcomes and records the major accomplishments in preventing the spread of the disease.

This area of the NSP addressed the issue of MTCT in detail stating that the aim of the MTCT programme was the reduction and eventual elimination of HIV/AIDS among children. Figure 1 tracks the progress of the country in the prevention of mother-to-child-transmission. Furthermore, while HIV/AIDS transmission through substance abuse and blood transfusion is
rare in Trinidad and Tobago, the NSP identified the need to target and continue addressing these issues.

**Figure 1: Percentage of Antenatal Care Attendees Tested for HIV/AIDS in Trinidad and Tobago (2000-2008)**

Table 1: Targets of the National Strategic Plan versus Actual Achievements  
(Priority Area I – Prevention)

<table>
<thead>
<tr>
<th>Targets/Expected Outcomes</th>
<th>Achievements</th>
</tr>
</thead>
</table>
| Increased % of the pop. correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (90% by 2005 and 95% by 2007) | Increase in awareness of 77% of general pop. regarding the mode of HIV transmission  
Educated 90% of the 15-49 year old pop. on controlling the spread of HIV  
In 2009, 35.1% of males and 30.7% of females RCU in all sexual encounters  
A 50% increase in the number of young people aged 15-24 years RCU during sexual intercourse with a non-regular partner  
≥ 75% increase in the proportion of CSWs and MSM RCU during their last sexual experience and in all sexual experiences with non-regular sex partners in a week’s recall period  
A 50% reduction in the reported HIV incidence rate among prisoners and substance abusers  
A 50% increase in the number of HIV-free babies born to HIV-infected mothers  
≥ 40% of the 15-49 aged pop. accessing VCT services by the end of 2007  
A 90% increase in the proportion of health facilities reporting adequate availability of drugs for post-exposure prophylaxis for health personnel in both the public and private sector  
≥ 60% increase in the number of CSTI cases reported, counselled, managed and monitored | The PMTCT prog. has had 97.9% of mothers accessing care in the public sector tested for HIV by 2008  
The number of HIV exposed infants becoming infected has decreased as a result of free ARV medication prophylaxis  
Funds were allocated to 52 faith-based/ civil society organizations to develop education and counselling progs.  
HIV progs. were expanded into private and public sector workplaces (refer to Figure 1 below)  
n.a.  
n.a.  
n.a.  
n.a.  
n.a. |

CSWs: Commercial Sex Workers  
MSM: Men who have Sex with Men  
pop: population  
RCU: reporting condom use  
VCT: Voluntary Counselling and Testing  
prog(s): programmes(s)  
n.a.: not available.  
Source: Adapted from the UNGASS Country Progress Report – Trinidad and Tobago (2010).

Treatment, Care and Support

Priority Area II dealt with treatment, care and support. The NSP recognized the role of treatment in destigmatizing the disease and making prevention programmes more effective. Three strategic objectives were identified: (i) improved access to treatment and care of HIV/AIDS; (ii) reduction in the incidence of HIV/AIDS–Tuberculosis co-infection; and (iii) the creation of a
supportive environment for the infected and affected. Table 2 details the, targets and actual achievements.

Table 2: Targets of the National Strategic Plan versus Actual Achievements  
(Priority Area II – Treatment, Care and Support)

<table>
<thead>
<tr>
<th>Targets/Expected Outcomes</th>
<th>Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 6,000 People Living with HIV/AIDS (PLWHA) receiving free ARV therapy and HIV/AIDS care over the period 2003-2007</td>
<td>In 2007, 5,075 HIV/AIDS patients were receiving treatment and care, with 2,592 on ARV therapy</td>
</tr>
<tr>
<td></td>
<td>In 2009, a total of 6,646 patients were accessing treatment and care with 3,592 on ARV therapy</td>
</tr>
<tr>
<td>At least a 50% increase in the number of health practitioners trained in HIV/AIDS treatment and care at primary, secondary and tertiary levels</td>
<td>Reduction in inpatient costs as a result of significant increases in expenditure on ARV therapy from 2002-2009</td>
</tr>
<tr>
<td>≥ 90% increase in the number of health facilities with adequate supply of drugs for treating Opportunistic Infections (OIs)</td>
<td>205 children in Trinidad and Tobago currently accessing treatment and care</td>
</tr>
<tr>
<td>Reduction in incidence of HIV/AIDS-TB co-infection by 30% over the period 2004-2008</td>
<td>An additional 558 health personnel trained in the care of PLWHA</td>
</tr>
<tr>
<td></td>
<td>n.a.</td>
</tr>
<tr>
<td>An increase in the number of HIV/AIDS service organizations with enhanced ability to respond to the needs of their clients</td>
<td>TB/HIV deaths showed a steady decrease from 43.8% (2005) to 23.2% (2009)</td>
</tr>
<tr>
<td>A referral system between HIV/AIDS service organizations, public and non-governmental organizations (NGOs) for the provision of social support fully developed and operational</td>
<td>In 2008, there were 322 registered TB cases of which 73 (22.7%) were HIV positive</td>
</tr>
<tr>
<td>At least 75% of PLWHA and 50% of persons affected by HIV/AIDS receive supportive counselling</td>
<td>Civil society continues to provide care for PLWHA</td>
</tr>
<tr>
<td>.a.: not available.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Source: Adapted from the UNGASS Country Progress Report – Trinidad and Tobago (2010).</td>
<td>HIV/AIDS counselling and testing policy finalized, approved and disseminated between 2008 and 2009</td>
</tr>
</tbody>
</table>

While it is true that much was accomplished in treatment, care and support, more could have been accomplished in Priority Area II at the end of the NSP period of 2008. For example, many persons, particularly among the most at risk population segments remained reluctant to access testing and treatment and care services. Moreover, policy guidelines for service delivery were neither readily available nor diligently adhered to and access to ARV therapy services in the public health sector remained centralized.
Advocacy and Human Rights; Surveillance and Research; Programme Management, Coordination and Evaluation

Priority Area III (Advocacy and Human Rights) focused mainly on reducing discrimination against persons infected with the disease and protecting human rights. Two strategic objectives were identified: (i) the reduction of stigma and discrimination against PLWHA; and (ii) guarantee of human rights for PLWHA and other groups affected by HIV/AIDS. At the end of the period, one of the gaps under this priority area was the limited availability and unwillingness of some clinicians to provide HIV/AIDS care and treatment services.

In providing interventions to deal with the HIV/AIDS epidemic, there is a need for on-going surveillance to determine the effectiveness of programmes. Priority Area IV (Surveillance and Research) had two main objectives: (i) surveillance system strengthening; and (ii) undertaking and participating in effective clinical and behavioural research on HIV/AIDS and related issues.

While some studies were executed and yielded epidemiological data, by the end of the strategic planning period, there continued to be an absence of a comprehensive surveillance system for HIV/AIDS with coverage of both the public and private sectors.

Priority Area V (Programme Management, Coordination and Evaluation) fell under the auspices of the National AIDS Coordinating Committee (NACC) and included: mobilizing national commitment, developing an appropriate management structure, adequate and sustained resources to support implementation of the plan and of utmost importance, monitoring the implementation of the response. The strategic objectives were: (i) to achieve national commitment, support and ownership of the expanded strategic response to HIV/AIDS; (ii) to monitor the implementation of the expanded response; and (iii) to build capacity among critical stakeholders in the expanded national response.

Table 3 (overleaf) shows the targets and actual achievements related to priority areas III, IV and V.
Table 3: Targets of the National Strategic Plan versus Actual Achievements (Priority Areas III, IV and V)

<table>
<thead>
<tr>
<th>Targets/Expected Outcomes</th>
<th>Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority Area III – Advocacy and Human Rights</strong></td>
<td></td>
</tr>
<tr>
<td>≥ 90% increase in the proportion of health care providers with positive attitudes towards HIV positive persons</td>
<td></td>
</tr>
<tr>
<td>*At least 50% of the general population having an accepting attitude towards HIV+ persons</td>
<td>*KAPB survey (2007) showed that 80% of the pop. adopted an accepting attitude toward PLWHA</td>
</tr>
<tr>
<td>*At least 50% reduction in the number of cases of HRAs against PLWHA</td>
<td>*The Human Rights Desk has been in operation and 80 complaints have been investigated since November 2006</td>
</tr>
<tr>
<td>*At least 50% of all public and private sector organizations have implemented workplace policies</td>
<td>*Implementation of a national workplace policy for PLWHA covering the GoTT and private sector in April 2008</td>
</tr>
<tr>
<td>*Enactment of legislation to prevent HIV/AIDS discrimination</td>
<td>*A review has been undertaken of the impact of laws in T&amp;T on PLWHA</td>
</tr>
<tr>
<td>Enactment of legislation to prevent human rights abuses against PLWHA and other groups affected by HIV/AIDS</td>
<td>The Draft National Policy on HIV/AIDS has been prepared</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Priority Area IV – Surveillance and Research</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurate and timely epidemiological data for the entire health sector produced and disseminated to key stakeholders every quarter from 2004</td>
<td>Research projects undertaken include the KAPB Survey (2007) and the Management of Sexual Relationships of Young Women in Trinidad (2009)</td>
</tr>
<tr>
<td>Evidence of a national policy-driven research agenda and the dissemination of results from these projects</td>
<td>Evaluation studies of educational material and campaigns and focus group testing have been conducted to aid the improvement of the material</td>
</tr>
<tr>
<td>Improved ability to develop targeted HIV/AIDS education messages and other intervention strategies</td>
<td>The WB funded the pilot testing of a computer-based HIV/AIDS surveillance system in 8 HIV treatment and surveillance sites</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Priority Area V – Programme Management, Coordination and Evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enactment of legislation for the operationalizing of the NACC</td>
<td></td>
</tr>
<tr>
<td>Annual budgetary allocation to the NACC from 2003</td>
<td></td>
</tr>
<tr>
<td>Individual sectors developing and implementing sector-specific HIV/AIDS work plans</td>
<td>T&amp;T has produced biennial national monitoring reports on the status of the HIV/AIDS epidemic</td>
</tr>
<tr>
<td>Development of NSP monitoring indicators</td>
<td></td>
</tr>
<tr>
<td>Annual evaluation reports delivered to the national community</td>
<td></td>
</tr>
<tr>
<td>T&amp; ⁠T has produced biennial national monitoring reports on the status of the HIV/AIDS epidemic</td>
<td></td>
</tr>
<tr>
<td>NACC staff trained to perform their functions effectively and efficiently</td>
<td></td>
</tr>
<tr>
<td>Critical sectors are empowered to effectively administer programmes and activities at the level of the community</td>
<td></td>
</tr>
<tr>
<td>Ongoing training is provided to community-based stakeholders</td>
<td></td>
</tr>
<tr>
<td>Cabinet approved the employment of HIV co-coordinators in all Government Ministries and Departments</td>
<td></td>
</tr>
</tbody>
</table>

HRA: Human Rights Abuse  T&T: Trinidad and Tobago  WB: World Bank

Source: Adapted from the UNGASS Country Progress Report – Trinidad and Tobago (2010).
Cost of Implementing the NSP: Projected versus Actual Expenditure

The estimated cost of implementing the NSP, covering all priority areas and their targeted objectives, over a five year period (2004-2008) was TT$569,06 million (US$90.32 million). However, actual expenditure exceeded the estimates in four of the priority areas—the exception was Priority Area II (refer to Table 4). Given the significance of Priority Area II in the budget (65% of allocations), under-spending in this area dominated over-spending in the other areas and resulted in overall actual spending on implementation of the Plan being approximately 27.84% less than budgeted.

Table 4: Projected Cost versus Actual Expenditure on NSP Implementation (2004-2008, $ Millions)

<table>
<thead>
<tr>
<th>Priority Area</th>
<th>Projected TT$</th>
<th>Actual TT$</th>
<th>Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Prevention</td>
<td>132.67</td>
<td>142.4</td>
<td>7.33</td>
</tr>
<tr>
<td>II. Treatment, Care and Support</td>
<td>369.62</td>
<td>156.48</td>
<td>-57.66</td>
</tr>
<tr>
<td>III. Advocacy and Human Rights</td>
<td>3.21</td>
<td>8</td>
<td>149.22</td>
</tr>
<tr>
<td>IV. Surveillance and Research</td>
<td>26.01</td>
<td>32.68</td>
<td>25.64</td>
</tr>
<tr>
<td>V. Programme Management, Coordination and Evaluation</td>
<td>37.55</td>
<td>71.1</td>
<td>89.35</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>569.06</strong></td>
<td><strong>410.66</strong></td>
<td><strong>-27.84</strong></td>
</tr>
</tbody>
</table>

Source: Adapted from the UNGASS Country Progress Report – Trinidad and Tobago (2010).

In the case of Priority Area II – Treatment, Care and Support, ARV therapy accounted for the largest cost under this priority area and it was also the single most expensive component of the entire NSP budget (standing at 25.7% of the total NSP budget) as well as of actual expenditure. The NSP provided projections based on an ARV therapy cost of US$1200 per person for the years covering the strategic plan which amounted to a total cost of US$23.19 million.

It should be noted however, that the actual spending on ARV therapy was much lower than projected. While the estimates stated that 19,327 patients would be on ARV therapy, in reality, only 9,450 patients were by the end of the period. There may be several contributory factors that led to the shortfall in the numbers treated, including infrastructural limitations, reluctance of persons to obtain treatment and delays in implementation of the treatment programme. Overall therefore, NSP spending on ARV therapy totalled US$11.34 million, just half of the budgeted expenditure. Details are provided in Table 5.
Table 5: Projected and Actual Number of Patients on ARV and Cost of ARV Therapy (2004-2008)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Patients on ARV Therapy</th>
<th>Cost (US$ Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Projected</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1 - 2004</td>
<td>1800</td>
<td>2.16</td>
</tr>
<tr>
<td>Year 2 - 2005</td>
<td>2350</td>
<td>2.82</td>
</tr>
<tr>
<td>Year 3 - 2006</td>
<td>3230</td>
<td>3.88</td>
</tr>
<tr>
<td>Year 4 - 2007</td>
<td>4695</td>
<td>5.63</td>
</tr>
<tr>
<td>Year 5 - 2008</td>
<td>7252</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td><strong>19,327</strong></td>
<td><strong>23.19</strong></td>
</tr>
<tr>
<td><strong>Actual</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1 - 2004</td>
<td>1100</td>
<td>1.32</td>
</tr>
<tr>
<td>Year 2 - 2005</td>
<td>1450</td>
<td>1.74</td>
</tr>
<tr>
<td>Year 3 - 2006</td>
<td>1900</td>
<td>2.28</td>
</tr>
<tr>
<td>Year 4 - 2007</td>
<td>2300</td>
<td>2.76</td>
</tr>
<tr>
<td>Year 5 - 2008</td>
<td>2700</td>
<td>3.24</td>
</tr>
<tr>
<td></td>
<td><strong>9,450</strong></td>
<td><strong>11.34</strong></td>
</tr>
</tbody>
</table>


Expenditure under Priority Area III – Advocacy and Human Rights, the least costly priority area of the NSP and Priority Area V – Programme Management, Coordination and Evaluation was almost double what was budgeted in the NSP. Spending on Priority Area IV – Surveillance and Research also exceeded the amount budgeted. This situation may be reflective of an underestimation of the cost of systems that needed to be put in place to bolster the weak framework into which the NSP was implemented and upon which the Prevention and Treatment and Care areas were to be built.

Discussion

Overview

Between 2006 and 2009 the prevalence rate rose from 1.2% to 1.5% (NACC 2010). This gradual increase can be attributed to the fact that ARV therapy was instituted in 2002 as well as individuals engaging in safer sexual practices and increases in the number of unreported cases. The success of the NSP in the area of prevention is a critical factor in the low incidence rate of the disease and the success in that area is commendable. Given that the expanded national response was set against the backdrop that the disease had serious implications for the economy, it is important that studies be done to identify how the number of persons receiving free ARV
medication translates into productive life years. This is important. With respect to the treatment of opportunistic infections (OIs), which require proper diagnosis and management, more personnel and equipment are required to treat these infections in an effort to reduce the frequency.

**Youth**

Although a lot has been accomplished in the education of the general public and vulnerable/high-risk groups with respect to safety in sexual practices, there have been challenges in effecting behaviour change especially among the youth. An indicative factor in the context of Trinidad and Tobago is the number of teenage pregnancies which shows that many youths are still engaging in unsafe sexual practices. An intervention which may be deemed useful is the introduction of Sex Education into school curricula.

While the NSP has identified the use of “youth-friendly” health services in dealing with STIs, and has highlighted the use of peer groups as an intervention which, in the experience of the developed countries, has had a greater impact than condom campaigns, the need for more specificity as to what those services and initiatives are is warranted. With the prevailing sexual patterns among youths, focus should be placed on practical and comprehensive services targeted towards changing some of these risky behaviour patterns.

**At Risk Populations**

The guiding principles of the NSP namely inclusion, sustainability, accountability and respect for human rights work in close tandem with the five priority areas which constitute this comprehensive response to the HIV/AIDS epidemic. Inclusion was defined in terms of reflecting the views of all major sectors with particular interest being placed on PLWHA, youth and women. However, inclusion should also reflect the views of MSMs and CSWs. Important here is the stigma attached to CSWs, MSMs and homosexuals (although the NSP has not used the term homosexuals), which may be reflected in the data collected as these individuals may not admit to their sexual orientation for fear of being discriminated against.

Additionally, considering the illegality of prostitution, it is difficult to estimate the extent of CSWs. The issue of CSWs, MSMs and homosexuals are a part of our reality and should be addressed because changing circumstances in the external environment can impact on the spread of the disease. Identified in the NSP, however, is the need for confidentiality among health care professionals as a possible intervention to allow these vulnerable individuals to be comfortable enough to access treatment and care. The focus should be on changing the behavioural patterns of these high-risk individuals, including social norms and attitudes as it relates to sex.

**Treatment and Care**

In providing treatment, care and support, the issue of access to ARV therapy which is provided free of charge in Trinidad and Tobago arises. While this may place an additional burden on already scarce resources, the spending is necessary because of the nature of the disease. There
are however challenges, which may negate the effects of ARV therapy. These include individuals being unaware of the illness until it is at a terminal stage, individuals not taking the required medication on a regular basis and in some cases, patients developing drug resistance to the ARV medication.

**Stigma and Discrimination**

The NSP has identified the need to train medical personnel in the execution of treatment, care and support. However, these personnel are required to volunteer for these training programmes as it is not compulsory. This may prove to be a challenge because of the issue of stigma and discrimination. Some health care professionals may choose not to work in areas that deal with PLWHA. The relevant authorities need to put mechanisms in place to ensure that the people who require HIV/AIDS-related treatment receive it in a timely and professional manner.

In dealing with those persons who are infected with and affected by the disease, the NSP highlighted its intention to provide economic and social support to these persons inclusive of HIV/AIDS orphans. It may prove useful to undertake research regarding programmes which may be valuable in this context. Many persons are very critical of individuals infected with and affected by HIV/AIDS for a variety of reasons including lack of education about the disease itself and because of their belief systems. This issue of stigma and discrimination is addressed under Priority Area III. The challenge here is changing the beliefs of individuals in society as a means of adequately addressing the epidemic. The NSP has correctly highlighted the need for legal intervention in dealing with issues of human rights for PLWHA in the workplace and in the wider community. With respect to advocacy, the GoTT needs to exert a stronger influence and commitment to supporting HIV/AIDS programmes.

Local government and other institutions need to play an active role in identifying necessary interventions as this can impact upon the prevention and treatment areas of the NSP. The guiding principles needed to ensure respect for human rights requires legislative action in protecting the people who may be discriminated against as a result of their lifestyles. In Trinidad and Tobago, the Equal Opportunity Act, 2000 prevents discrimination against persons according to status which refers to sex, race, ethnicity, origin (including geography), religion, marital status and disability. In fact the law clearly states by sex, however, this does not refer to sexual preference or orientation of any kind hence; there is an open door to discrimination against individuals based on their preference of a same-sex partner.

**Surveillance**

On-going surveillance and data collection that captures changes in the environment are key inputs into the determination of the effectiveness of outlined interventions. A strong national surveillance system (adequately covering both public and private sector) and implementation of research initiatives will assist in improving data collection. Further, the monitoring and evaluation of interventions were highlighted throughout the NSP document, which lends itself to the reality that there is a constant need to estimate the burden of the disease and present the facts for proper planning and understanding of its economic implications. Research is needed to help
understand the spill over effects that the disease may have on the living conditions of individuals in all sectors, included here is research into new methods of treatment and ways to suppress the disease. It is therefore important for decision makers to commit to and support this area which, according to the NSP, involves the upgrading of national laboratory systems and proper training of employees of the National Surveillance Unit (NSU).

**NSP Coordination**

The NACC was identified as the entity responsible for programme management, coordination and evaluation. Its functions included mobilizing national commitment, developing an appropriate management structure, ensuring that there were adequate and sustained resources to support implementation of the plan and of utmost importance, monitoring the implementation of the response. Based on the NSP, the NACC was to have a coordination role and an implementation role. However, along the way, these lines became blurred and the NACC became involved in implementing activities. There was need for the NACC to maintain its coordinating function and for implementing agencies (NGOs, CBOs, public and private health institutions) to be further enabled to carry out the various roles assigned under the NSP. Improved communication between the different agencies involved in providing HIV/AIDS-related services will lead to better coordination of response activities, a reduction of wastage and as such, a more efficient use of resources.

**Financing**

A plan of this nature requires significant financial input by key stakeholders. Annual increases in financial resources will be expected in areas such as human resource training and recruitment which can be attributed to “gradual capacity building”. However, given the fact that the NSP had to be extended due in large part to human resource constraints, it can be seen that an enabling environment is critical for the success of any programme of this nature.

Further examination of the priority areas and their financial allocations raises the issue that the allocated budget is adequate for the task at hand and that there is the possibility of reallocating resources to other areas with low funding. For example, under Priority Area I - Prevention, the allocation to MTCT is US$3.83 million and to risk groups, US$1.06 million. Having identified the importance of targeting high-risk and vulnerable groups, it may be necessary for increased allocations in this area. Furthermore, while one of the primary areas of success has been the reduction in MTCT, it is recognized that the continued injection of resources is necessary in order to keep MTCT under control.

In terms of the allocation to continued access to ARV, the allocation was US$23.19 million based on a 30% to 60% increase in the number of persons being treated for HIV/AIDS in Trinidad and Tobago. This increase can be categorised as a success since individuals are now presenting themselves for testing and receiving the necessary treatment.

Although there are opportunities to make more efficient use of the financial resources used to combat HIV/AIDS, the investment in its eradication is most certainly worth the effort. The gains
from investing in the NSP are reflected in social, economic and developmental rewards. It is likely, based on trends, that HIV/AIDS mortality, incidence and prevalence rates would have been higher in the absence of the NSP which helped to restrict the growth of the epidemic. While the extent of the effect of the NSP on the epidemic could have been notably greater, there is no doubt that its implementation has had a positive impact upon the HIV/AIDS epidemic in Trinidad and Tobago.

Conclusions and Recommendations

The magnitude of the HIV/AIDS epidemic warrants action and stresses upon the need for policymakers to tailor interventions in keeping with the nature and scope of the disease. The multisectoral approach to combating the epidemic has realized many benefits including a decrease in AIDS cases due to ARV therapy. There is, however, the need for continuous surveillance and contextual data to determine the effectiveness of proposed interventions and how best they can be implemented. Given the many challenges identified in implementing the plan, there is a need for improved allocation of resources and consistent monitoring and evaluation to establish whether the plan is actually accomplishing its outlined goals and operating as efficiently as intended. Despite the existence of a weak health platform and the many challenges faced in implementing the NSP, the goals outlined by the NSP are achievable; however, there is the need for a strong institutional framework to provide the foundation for such success.

It is important that we understand that although HIV/AIDS is a unique disease, the manner in which we address the issues pertaining to access to treatment and care by HIV/AIDS patients takes place within the broader context of the values of the society and the resource and system constraints of the health delivery network.

In addressing the challenges identified in the NSP, some of the recommendations for continued progress include:

- **Continued health sector reform.** There is the constant need to strengthen health care infrastructure to respond to health issues and by extension, HIV/AIDS. This comes as a result of the weak health platform upon which the NSP was implemented.

- **Focus on changing behaviour patterns among risk groups.** Since the youth are among the high-risk groups and are often reluctant to visit public and even private health facilities because of the stigma attached, health services should be designed to increase the comfort level of these individuals in accessing the services available to them. Professionals should be trained to deal with such high-risk groups in a practical manner. This can further assist with the confidentiality issues that currently plague the health system.

- **Greater incorporation of the Tobago response initiative.** The NSP stated that the factors affecting the spread of the disease in Tobago were different from that in Trinidad. Detailed analysis of the Tobago situation is necessary so that interventions can be more targeted.
Continuous research. Given the nature of the disease and the ever-changing environment, research will be beneficial in identifying successful interventions as well as shedding light on the situation of various groups living with HIV/AIDS.

The priority areas outlined in the NSP are necessary in counteracting the obstacles faced in controlling HIV/AIDS such as, “lack of coverage and access to prevention services and lack of rigorous evaluation” (Jamison et al 2006). Given the multisectoral approach in combating this disease, there is a need to conduct studies to ascertain the effectiveness and the benefits of the programmes that have been implemented. Further, there is need for training the relevant personnel in HIV/AIDS education, counselling and treatment. There is also a greater role for religious organizations as one of the main institutions shaping individuals’ belief systems and behaviours in combating this social ill.

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The predominant mode of transmission is through sexual exposure.

For full details of the Trinidad and Tobago Equal Opportunity Act, 2000 please refer to ILO (2008).