The Human, Social and Economic Costs of Substance Abuse in the Americas (Cost Programme)

Estimating Direct Government Expenditure on Drug Demand Reduction in Barbados

Report Prepared for

The Inter-American Drug Abuse Control Commission &
The National Council on Substance Abuse, Barbados

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Pernell Clarke
Principle Investigator
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Executive Summary

This report presents the details of the baseline study implemented under the pilot project entitled ‘The Human, Social and Economic Costs of Substance Abuse in the Americas (Cost Programme)’. The main objectives of the study are to estimate Government Expenditure on demand reduction activities, to collect and report data required for the indicators known as level one indicators, and to provide a basis on which to build future studies as the pilot project progresses.

The methodology employed was one in which secondary data on drug related costs and activity for some institutions in the health and criminal justice sectors was collected, validated and tabulated in a simple and logical format. For the estimation of government expenditure, the appropriate calculations were performed on the relevant data and the results were tabulated and graphed.

The results were not at all surprising. As was indicated in the proposal for this project, the biggest constraint was the lack of relevant data for cost estimation in Barbados, and this is borne out in the results. Some data was collected, and most of the level one indicators were satisfied. Information on requests for treatment, number of drug related convictions and previous substance abuse studies was obtained, but drug related deaths or injuries due to homicides, accidents of suicides was not available. Also not available was enough information to fill the template that was used as a guide to estimating direct government expenditure on demand reduction and supply reduction, so only partial information is provided. The expenditure by Government on demand reduction was conservatively estimated at $3,349,602.00 for the year 2000 and this figure includes both prevention and treatment activities.

The study did highlight the need for some improvements to the approach to the cost study that would result in a rigorous yet simple methodology. These improvements relate specifically to the refinement of the indicators used and to the use of the template for cost estimation. A method of using an instrument in identifying data requirements and institutions that could provide it was also suggested. Finally suggestions for the future of the pilot project in Barbados include a study of hospital emergency rooms and aspects of the criminal justice system in order to determine attributable fractions.
Background

In 1998, the Barbados Government published the first of several research reports about drugs and their use in Barbados. These studies utilised Rapid Assessment Survey (RAS), population survey, and focus group methodologies as the means by which to collect relevant, timely and in some cases representative data. The RAS studies have provided the most comprehensive set of information to date and the report of the second RAS was published in July of 2000. This report concludes among other things that:

- Alcohol, marijuana and cocaine are the substances that are preferred in Barbados. Tobacco is also used even though it was not considered in the RAS studies.
- Many of the persons who consume these substances experienced problems at some level in the home, at work, with their health, or through some combination of the above.
- Most of the persons interviewed believed that drug use and its attendant problems were getting worse and that more efforts need to be made to control it.

Long before the findings of these publications were known, the Government of Barbados had announced its commitment to the control of drug use by establishing the National Council on Substance Abuse (NCSA) in 1995 and this was a consolidation of earlier efforts to deal with this issue. It has over the last eight years received progressively increased support financially and in the provision of human and other resources. It is responsible for prevention, research, education and advocacy as it relates to reducing the demand for drugs (both licit and illicit). More recently, the Ministry of Health, which provides treatment services for persons with psychoactive substance use disorders, included a sum of money for the first time in its budget to purchase similar services from private institutions that provide them. This was in response to the widely held belief that Barbados has a less than adequate capacity to provide these services to those that need them. This then represents a significant increase (in excess of Bds. $800,000) in the Government’s commitment to drug demand reduction in Barbados.

In the area of supply reduction, the Government has also shown consistent commitment through the use of several agencies in the criminal justice system. The police, customs and the Defence
The idea of the costs associated with substance use and abuse has been a topical one for many years and has recently gained prominence as one of the key indicators on the Multilateral Evaluation Mechanism (MEM) questionnaire. The Inter-American Drug Abuse Control Commission explains that ‘the objective of the MEM is directly to strengthen mutual confidence, dialogue, and hemispheric cooperation in order to deal with the drug problem with greater efficacy. It follows the progress of individual and collective efforts of all the countries participating in the Mechanism, indicating both results achieved as well as obstacles faced by the countries’ 1. In the questionnaire of indicators for the First Evaluation Round (2000) of the MEM, goal number 5 was to estimate the costs that the drug problem represents for a country. The specific indicator for this goal, indicator number 61, was ‘the existence of a system to estimate the human, social, and economic costs of the drug problem’. It was soon realized in Barbados, and indeed in many other countries, that the capacity did not exist to adequately estimate these relevant costs. There was little or no information submitted to this section of the questionnaire. At the May 2001 Summit of the Americas in Quebec, the Inter-American Drug Abuse Control Commission (CICAD) was mandated to do the following:

‘Develop within the framework of CICAD, a long-term strategy that includes a three-year programme to establish a basic and homogeneous mechanism to estimate the social, human, and economic costs of the drug problem in the Americas, and to support countries through the necessary technical assistance.’

This mandate was a reflection of Recommendation number 20 in CICAD’s Hemispheric Report 1999 – 2000, of the MEM.

In May of 2002, CICAD prepared a project outline for fulfilling this mandate that had the following overall objective:

‘To develop a series of interrelated programmes that will involve collaboration, technical assistance, education, training, pilot programmes, and technical materials for the purpose of aiding countries to measure the extent, impact, and costs of substance abuse on their nations.’

This report presents the findings of the first of a series of small manageable research projects that will attempt to estimate these costs in Barbados and as such will serve as a baseline study for the Human, Social and Economic Costs of Substance Abuse Programme in Barbados.

**Objectives and Scope of Study**

The project will see the implementation of a logical sequence of studies beginning with those that present the least methodological challenges, before moving on to the more complex cost estimation. The objectives for *this* study will therefore be the following:

1. To conduct a national inventory of cost estimates produced for the various segments of the health sector in Barbados
2. To conduct an inventory of reports prepared on cost estimates for drug control (supply reduction and demand reduction) in Barbados
3. To collect data on level one direct cost indicators (see Indicators for the CICAD Cost Study in Appendix A)
4. To apply the prescribed methodology and template (See Appendix B) for calculating direct government expenditures on drug demand reduction activities (i.e. prevention and treatment) in Barbados
5. To produce an interim report on the above activities by September 30, 2003
**Scope of this Report**

This study’s main aim is to estimate government expenditure on drug demand reduction activities in Barbados for the period 1996 to 2000. Drug demand reduction is essentially a set of activities that aim to reduce the consumption of legal and illegal substances and its attendant repercussions by:

1. Using strategies that seek to prevent the onset of drug use
2. Helping users to break the habit
3. Providing treatment, rehabilitation and social reintegration

This report therefore focuses on the estimation of government expenditure on demand reduction activities mainly through the NCSA, the Ministry of Health, and the government run Drug Rehabilitation Unit. All substances are considered (legal and illegal) and at this stage very little distinction will be made between them except where treatment is concerned.

This study will also serve as the baseline for subsequent studies in the cost programme and hence will also produce the following information:

- A comprehensive bibliography of previous drug-related studies in Barbados
- A list of previous reports that contain cost estimates that will be of use to the programme
- Level one indicator data was also collected.

The data that was collected was mainly from secondary published sources or directly from institutions that could provide it.
Methodology

Psychoactive substance use places pressure on government budgets because of expenditure related to law enforcement, health care, welfare and prevention programmes. This study attempts to estimate government expenditures on prevention, research and treatment. It focuses on direct expenditures by government and should not be confused with a budgetary impact study\(^2\). The study methodology may be more accurately referred to as the estimation of the ‘drug budget’, which can be used as an indicator that places a monetary value on a government’s response to the problem of drugs. This ‘value’ on its own may be interesting, but it becomes more useful when it is expressed as a percentage of the gross domestic product (GDP) of the country. Only then, when it is placed within a specific context, does this monetary value assume greater significance. In this way, persons at the policy level can clearly see the aggregate value of drug control efforts.

Prevention Activity

In 1990 the first master plan ‘Against Drug Abuse – A National Approach’ was approved as a policy document for demand reduction in Barbados. Prior to this there were other substance abuse bodies that were funded by the Government. These were:

- The Advisory Committee on Drugs (1985)
- The Psychiatric Hospital Drug Team (1986)
- The Drug Education Committee (1987)
- The National Anti-Narcotics Committee (1987)
- The National Advisory Council on Drugs (1991)

These bodies however were either not set up for, or able to implement demand reduction strategies and this led to a revamping of the government’s approach to prevention. With the

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\(^2\) A budgetary impact study would involve the estimation of both expenditures and revenues resulting directly or indirectly from substance abuse. Note that the use of substances such as alcohol and tobacco generate significant revenue for government.
assistance of the United Nations Drug Control Programme (UNDCP) as it was then called, and 
the passing of the relevant legislation, The National Council on Substance Abuse was established 
in 1995. There was now a permanent administrative coordinating and data resource center with 
trained staff to implement a demand reduction strategy. The vast majority of government funding 
for prevention activities therefore flows through the NCSA and hence this will be the major 
institutional source of data to inform this study. Published financial data contained in NCSA 
Annual Reports was used to inform this study.

Treatment for Drug Use

There are three main providers of treatment for drug dependent persons in Barbados. These are 
The Drug Rehabilitation Unit at the Psychiatric Hospital, The Substance Abuse Foundation at 
Verdun House in St. John, and Teen Challenge at the former Mapps College in St. Phillip.
The lone government facility for drug treatment is the Drug Rehabilitation Unit. The stated aims 
and objectives of the unit are:

1. To provide professional services to clients suffering from alcohol and other chemical 
dependencies, and also their families.
2. To meet the physical, emotional, spiritual and social needs of these clients who require 
the services.
3. To maintain a high standard of client care and support to provide an environment that is 
conducive to teaching/learning for all members of staff, clients, families and others from 
the community.
4. To provide a working environment which promotes the development of personal growth 
and fosters good interpersonal relationships between clients and staff by continuous 
evaluation.
5. To provide a continuity of care for clients, their families and significant others upon 
discharge of the clients from in-patient care.
6. To obtain and maintain accurate data, to determine clients’ needs and assist where 
possible, with research projects aimed at improving the services.
The Unit is a small compact one with a bed complement of twelve (12) persons and it is run by a coordinator who is assisted by two (2) Drug Therapists and other staff members. In addition to treating a similar range of persons as those seen at private facilities, it also specializes in treating persons whose drug dependence is associated with psychiatric illness and other co-morbidities. The Unit provides an eight-week residential programme that is based on the Twelve Step model, and it includes relapse prevention and occupational therapy. Walk-in group sessions are also held at the unit and attendance at these sessions for two (2) weeks is a pre-requisite for clients’ admission to the facility.

The type of data collected from this institution includes:

- Data on admissions by drug(s) used, sex and age
- In-patient costs
- Expenditures during the period under consideration.

Other Information Collected for the Template on Government Expenditure

A Note on the Template

The template that will be used to calculate direct government spending was designed for this study by the late Professor of the Robert Wood Johnson Medical School and former CICAD Consultant Jeffrey Merrill. The template serves as a guide to countries in the calculation of government spending on drug demand reduction and supply reduction activities. Specifically, it includes the major areas of activities under supply reduction and demand reduction, the activities themselves, the agencies that perform these activities, and an estimate of the amount spent. The template includes direct expenditures only, and this refers to money spent on services and activities that are paid for or purchased by the government. The following definitions will apply:

Government Spending: This refers only to payments made directly by government agencies for their own activities or to contract or pay for those same services by an outside entity working

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3 Appendix C shows the Template For Calculating Government Expenditures
directly for them. It would not include services funded by philanthropy, patient payments and health insurance, or funds from other private sources.

Direct Spending: This refers only to those expenditures in each area that contribute to reducing either the supply or demand for substances. It does not refer to all the economic ways in which spending may relate to substance use and abuse.

Under ‘supply reduction’, the activities that are considered relate to the following:

- Military
- Customs
- Police
- Courts
- Corrections
- Crop Subsidies

It should be noted that in Barbados, under ‘Corrections’, we would have to include persons who are remanded or incarcerated for ‘Possession of Drug Apparatus’, ‘Drug Possession’, and ‘Drug Handling’. The activities related to ‘Crop Subsidies’ do not apply to Barbados since we are not considered a supplier of drugs. There were very few cases in the last few years of persons who were incarcerated for drug cultivation in Barbados.

Under demand reduction there are the two categories of Treatment and Prevention. Under Treatment the activities include the following:

Direct government payment for treatment.

- Clinics
- Treatment Centres
- Hospitals
Treatment services purchased by government

- Private Facilities
- NGOs

Incarceration for Users

- Jails and Prisons
- Treatment Programmes

Note that under the sub-category ‘Incarceration for users’ there are activities related to prisons and treatment programmes. At this time, it may not be possible to separate these expenditures from those considered under ‘Corrections’.

Under prevention the following activities are considered:

School Programmes

Other

- Community Organisations
- NGOs
- Media (e.g. ads)

For each activity the template has a column in which all the agencies carrying out the work are listed, and another column in which the total expenditure for a particular fiscal year is recorded.

Indicators for the Cost Study

What are indicators and why do we need them? The estimation of the costs of substance abuse requires the application of a methodology that requires extensive data. The reason for this is that
you will not find criminal justice or health care agencies with accounting systems that make entries for ‘expenditure on substance abuse related activities’. If this were the case, then there would be no need for a study since all the required information could easily be pulled from existing records. Furthermore, there are some indirect costs (e.g. productivity losses and morbidity costs) that can be attributed to substance abuse, for which absolutely no accounting whatsoever is done. These costs in some countries where they have been estimated are substantial. Hence the estimation of costs will require the collection of several forms of data that are manipulated using the appropriate calculations and applied economic theory. The ‘International Guidelines For Estimation the Costs of Substance Abuse – 2001 Edition’ provides a tentative list of the data that is required to carry out a cost estimation study:

- Data on population structure by age and gender, and life expectancy by age and gender.
- Data required to estimate morbidity and mortality: prevalence data on drug use and injection drug use; number of deaths and hospitalizations, ideally by cause, age and gender; list of conditions which epidemiological research have shown to be attributable to drug use and the associated relative risks; estimates of the attributable fractions for certain causes of death and disease, based on local information, e.g., motor vehicle accidents, assaults, homicide, suicide.
- Health care costs: hospitalization costs, physician fees, costs of other professional services, and number of cases seen by physicians and other professional service providers by age and gender; ambulance costs (total costs, total number of trips, number of trips for drug-related causes); costs of pharmaceuticals used to treat drug-related conditions (total number of prescriptions, number of prescriptions by cause).
- Policy costs: police, court and corrections costs; expenditures on prevention and research related to drugs; costs of training for physicians, nurses other health professionals, law enforcement.

4 The Office of National Drug Control Policy (ONDCP) in the USA estimates the cost of productivity losses due to drug abuse for 1998 was close to 98.5 billion US dollars. (‘The Economic Costs of Drug Abuse in the United States 1992 – 1998’, ONDCP, 2001)
The stark reality is that Barbados, like most other developing countries, faces a huge challenge in applying the required methodology to cost estimation because a large amount of the data shown in the above list is not available. In some cases the data does not exist, it is incomplete, or it is in a format that makes it very unfriendly to users. Access to data that is available is also a challenge in itself. With this reality in mind, the CICAD cost study advisory team was able to develop a set of indicators that are to be used for the pilot countries in the cost study. The indicators are in effect a set of data requirements that would be the minimum that are necessary for the cost estimation in pilot countries. They were developed based on past experience, accessibility of information, availability of information and level of complexity. There are three levels of indicators and each level builds on the previous as the information becomes more complex and difficult to obtain. The full list of indicators with explanations can be found in Appendix 1 but a summary follows:

**Level 1: Direct Costs**

1. Number of requests for treatment at public and private institutions.
2. Number of drug-related deaths or serious injuries due to homicides, accidents, or suicides.
3. Number of convictions and length of sentence for drug trafficking.
4. Number of persons imprisoned for crimes or offenses connected with substance use (as cause or as consequence).
5. Substance use studies in the general population, among students, or in the workplace.
6. Determination of the validity of data supplied by the four countries on the standard form created by Jeffrey Merrill on direct government spending.
Level 2: Direct Costs

1. Number of substance-use induced hospital admissions and length of stay.
2. Arrests for possession and use: by length of duration and number of persons.
3. Number of persons undergoing treatment, type of treatment, and length of treatment.
4. Destruction of physical assets.

Level 3: Indirect Costs

1. Follow-up on persons who have been in treatment (cost-effectiveness).
2. Methodology to determine labor productivity loss.
3. Premature death costs.
4. Absenteeism costs.
5. Social impact of property (tangible and intangible) loss.
6. Economic loss due to morbidity.
7. Opportunity cost due to psychoactive substance use.

This study will collect data needed to satisfy the level one indicators which focus on direct costs. Each of these indicators will be explained in greater detail based on information provided by the Cost study Advisory Team:

Level 1: Low-level complexity indicators (direct costs)

1. Number of requests for treatment at public and private institutions.
   The aim is to record all cases in which treatment was requested. Institutions normally have records of this type and the idea is to ensure that coverage in each country is as complete possible. This information can be obtained by letter, telephone, personal visit, or e-mail; however the latter two methods may be the most effective.
2. Number of drug-related deaths or serious injuries due to homicides, accidents, or suicides.
   The main source is the Coroner’s Office in each country, and sometimes the police. Normally this information is in the public domain and may be obtained at a single visit. It should not be
forgotten that in the case of deaths there are three categories to be included: accidents (of any type, including overdose), suicides, homicides; in the case of injuries, all cases should be included that have been examined by the coroner or reported to the police as a result of any kind of violence or accident.

3. **Number of convictions and length of sentence for drug trafficking.**

   This includes persons convicted of distribution, sale, processing, or production of substances; persons on trial or arrested should not be included in this indicator.

4. **Number of persons imprisoned for crimes or offenses connected with substance use (as cause or as consequence).**

   This indicator concerns drug users or addicts who have committed offenses while under the influence of substances, or in order to obtain money to buy them.

5. **Substance use studies in the general population, among students, or in the workplace.**

   Refers exclusively to quantitative studies. In countries where no such studies exist the advisory team can help to find low-cost strategies for easy data collection.

6. **Determination of the validity of data supplied by the four countries on the standard form created by Jeffrey Merrill on direct government spending.**

   The persons responsible for providing the information to CICAD should try to establish whether the data presented are supported by adequate studies, or if they are approximations made by extrapolation or by other methods.
Results

A. Direct Government Expenditure on Demand Reduction

There are two institutions through which flows the vast majority of Government expenditure on the different components of demand reduction. These are the National Council on Substance Abuse (NCSA) and the Drug Rehabilitation Unit. The functions of these organizations have already been explained so this section will outline the expenditures and the calculations used to derive them\(^5\).

NCSA

This institution proved to be the one with the best available information. All figures were taken from audited and published financial statements (NCSA Annual Reports 1996 to 2000). Table 1 below shows the expenditure on various prevention activities from 1996 to 2000\(^6\). Chart 1 shows how total expenditure changes over the five-year period. Expenditure increases significantly over the period and the figure for 2000 doubles that in 1996.

Table 1. Government Expenditure on the Prevention Activities of the NCSA

<table>
<thead>
<tr>
<th>Year</th>
<th>School Programmes</th>
<th>Community</th>
<th>Research</th>
<th>Other Direct Expenditure (salaries, equipment, supplies)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>$30,770</td>
<td>$254,279</td>
<td>$0</td>
<td>$339,408</td>
<td>$624,457</td>
</tr>
<tr>
<td>1997</td>
<td>$3,335</td>
<td>$174,402</td>
<td>$0</td>
<td>$500,586</td>
<td>$678,323</td>
</tr>
<tr>
<td>1998</td>
<td>$12,650</td>
<td>$149,575</td>
<td>$0</td>
<td>$543,852</td>
<td>$706,077</td>
</tr>
<tr>
<td>1999</td>
<td>$14,909</td>
<td>$146,586</td>
<td>$1,193</td>
<td>$826,348</td>
<td>$989,036</td>
</tr>
<tr>
<td>2000</td>
<td>$102,019</td>
<td>$153,074</td>
<td>$42,124</td>
<td>$958,832</td>
<td>$1,256,049</td>
</tr>
</tbody>
</table>

\(^5\) All figures will be expressed in Barbados Dollars

\(^6\) Note that the financial year for the Barbados Government is from April to March.
The Drug Rehabilitation Unit

The Drug Rehabilitation Unit is one of the departments of the Psychiatric Hospital, but for Governments accounting purposes its budget and subsequent expenditure is not recorded separately. What this means, is that there are no available expenditure figures like those shown for the NCSA. What is available, are admissions figures and estimates of the average cost of an in-patient day for the unit.
Table 2. Admissions figures for the Drug Rehab Unit for 1996 to 2000

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Admissions</td>
<td>414</td>
<td>416</td>
<td>377</td>
<td>186</td>
<td>171</td>
</tr>
</tbody>
</table>

The explanation given by the Unit for the decline in the numbers of admissions suggests that private institutions that opened in 1999 and 2000 would have attracted many potential clients.

Cost Estimates

An inpatient day is an event where a patient is admitted to a hospital or clinic and spends at least one night at the institution. The only published estimates of costs at the drug rehab unit can be found in a 1995 Report on the Health Sector Rationalisation Programme in Barbados. It estimates the average cost per in-patient day at $180. Assuming that all else remains constant (ceteris paribus), this figure can be adjusted using the figures for inflation as shown below:

Table 3. Adjustment of Estimated Average Cost of an In-patient day Using Inflation

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflation Rate</th>
<th>Adjusted Cost of Inpatient Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>Baseline</td>
<td>$180.00</td>
</tr>
<tr>
<td>1996</td>
<td>2.4%</td>
<td>$184.32</td>
</tr>
<tr>
<td>1997</td>
<td>7.7%</td>
<td>$198.51</td>
</tr>
<tr>
<td>1998</td>
<td>-1.2%</td>
<td>$196.13</td>
</tr>
<tr>
<td>1999</td>
<td>1.5%</td>
<td>$199.07</td>
</tr>
<tr>
<td>2000</td>
<td>2.5%</td>
<td>$204.05</td>
</tr>
</tbody>
</table>

The annual expenditure at the Drug Rehab Unit can then be estimated using the following calculation:

\[
\text{(Number of admissions in any one year) x (number of in-patient days) x (average cost of an inpatient day) = estimated expenditure}
\]

\[\text{7 Taken from official Barbados Central Bank statistics}\]
This calculation assumes that all patients are seen on an inpatient basis, but this is obviously not the case. Data on outpatients was sketchy at best and there were no estimates for the cost of an outpatient day. The second assumption will be the number of inpatient days. No data on ‘length of stay’ was available. The length of the programme at the unit is eight weeks, but it would be unrealistic to assume that all patients who were admitted stayed for the full length of the programme. In the absence of this data we sought expert opinion on the average length of stay, and we were able to come up with an average of 8 weeks as an estimate. It was explained that most clients stay for the full 8 weeks of the programme, or slightly less, or slightly more. Hence by using these data and the calculation shown above, the estimated expenditure was calculated as follows:

Table 4. Calculation of Government Expenditure on Treatment

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Admissions</th>
<th>Adjusted Average Cost of In-Patient day</th>
<th>Average Length of Stay (days)</th>
<th>Estimated Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>414</td>
<td>$184.32</td>
<td>60</td>
<td>$4,578,508.80</td>
</tr>
<tr>
<td>1997</td>
<td>416</td>
<td>$198.51</td>
<td>60</td>
<td>$4,954,809.60</td>
</tr>
<tr>
<td>1998</td>
<td>377</td>
<td>$196.13</td>
<td>60</td>
<td>$4,436,460.60</td>
</tr>
<tr>
<td>1999</td>
<td>186</td>
<td>$199.07</td>
<td>60</td>
<td>$2,221,621.20</td>
</tr>
<tr>
<td>2000</td>
<td>171</td>
<td>$204.05</td>
<td>60</td>
<td>$2,093,553.00</td>
</tr>
</tbody>
</table>
The expenditure calculated using the expert estimate for average length of stay is the best under the circumstances where all required information is not available. Estimates of total government expenditure on demand reduction are shown below in table 5.

**Table 5. Estimates of Total Government Expenditure on Demand Reduction**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NCSA</td>
<td>$624,457.00</td>
<td>$678,323.00</td>
<td>$706,077.00</td>
<td>$989,036.00</td>
<td>$1,256,049.00</td>
</tr>
<tr>
<td>Drug Rehab Unit</td>
<td>$4,578,508.80</td>
<td>$4,954,809.60</td>
<td>$4,436,460.60</td>
<td>$2,221,621.20</td>
<td>$2,093,553.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$5,202,965.80</strong></td>
<td><strong>$5,633,132.60</strong></td>
<td><strong>$5,142,537.60</strong></td>
<td><strong>$3,210,657.20</strong></td>
<td><strong>$3,349,602.00</strong></td>
</tr>
</tbody>
</table>
This decline in total government expenditure from 1996 to 2000 would have been driven by the estimated decline in expenditure at the Drug Rehabilitation Unit.
B. Level 1 Indicators For the Cost Study

1. Number of Requests for Treatment at public and private institutions

Teen Challenge

The Teen Challenge programme started in June of 1997 and the figures provided are for June to July. The reported cost of an in-patient day is $135.

Table 6. Data on Admissions and length of treatment for Teen Challenge

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Requests</th>
<th>Number of Admissions</th>
<th>Average Length of Treatment (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>290</td>
<td>80</td>
<td>7.25</td>
</tr>
<tr>
<td>1998</td>
<td>479</td>
<td>150</td>
<td>6</td>
</tr>
<tr>
<td>1999</td>
<td>380</td>
<td>100</td>
<td>3.75</td>
</tr>
<tr>
<td>2000</td>
<td>177</td>
<td>60</td>
<td>4</td>
</tr>
<tr>
<td>2001</td>
<td>94</td>
<td>38</td>
<td>5</td>
</tr>
</tbody>
</table>

Verdun House [22]

This institution started its programme in July of 2000. The management at Verdun House was unable to provide annual statistics on admissions in time for the completion of this report. What they did provide are the following data for the period 2000 to 2003:

Table 7. Data from the Substance Abuse Foundation, Verdun House

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of persons requesting Treatment</td>
<td>17</td>
</tr>
<tr>
<td>Average Number of outpatient Visits per month</td>
<td>22 visits</td>
</tr>
<tr>
<td>Average number of in-patient days</td>
<td>90 days</td>
</tr>
<tr>
<td>Unit Cost of an Out-patient visit</td>
<td>$40</td>
</tr>
<tr>
<td>Unit Cost of an In-patient day</td>
<td>$76.50</td>
</tr>
</tbody>
</table>
Drug Rehab Unit

The data for this institution has been provided in the section above on direct government expenditure.

2. Number of drug-related deaths or serious injuries due to homicides, accidents, or suicides.

There is no data available for this indicator.

3. Number of convictions and length of sentence for drug trafficking

This data was provided by Glendairy Prison, the lone penal institution for adults in Barbados.\(^8\)

Table 8. Number of Convictions for Drug Trafficking and Range of Sentence Lengths

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Trafficking</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>20</td>
<td>17</td>
<td>18</td>
<td>18</td>
<td>1 – 60 months</td>
</tr>
<tr>
<td>Drug Cultivation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>6 – 24 months</td>
</tr>
</tbody>
</table>

\(^8\) The estimated cost per day to maintain a prisoner at Glendairy was $28.30 in the year 1996\(^{21}\).
4. **Number of persons imprisoned for crimes or offenses connected with substance use (as cause or as consequence).**

**Table 9. Number of Convictions for Drug-Related Crimes and Range of Sentence Lengths**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Possession</td>
<td>63</td>
<td>64</td>
<td>90</td>
<td>116</td>
<td>170</td>
<td>96</td>
<td>151</td>
<td>.75 – 60 months</td>
</tr>
<tr>
<td>Drug Handling</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>24 – 96 months</td>
</tr>
<tr>
<td>Drug Apparatus Possession</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>29</td>
<td>34</td>
<td>1 – 18 months</td>
</tr>
<tr>
<td>Drug Importation</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>8</td>
<td>9</td>
<td>24 – 96 months</td>
</tr>
<tr>
<td>Drug Exportation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6 – 24 months</td>
</tr>
</tbody>
</table>

Appendix B provides an estimate of government expenditure on prisoners in Glendairy for drug offences in the year 2000.

5. **Substance use studies in the general population, among students, or in the workplace.**

- Global Youth Tobacco Survey: Barbados 2002 Data Analysis, Prepared By Cadres for the National Council on Substance Abuse, Pan American Health Organisation and the Centers for Disease Control

6. Determination of the validity of data supplied by the four countries on the standard form created by Jeffrey Merrill on direct government spending

The data supplied for the template on government spending refers to the year 2000, the most recent one for which data is available, or to which calculations could be applied. The following table describes the sources of data or how the figures supplied were calculated.
### Table 10. Sources of Data Provided in Template

<table>
<thead>
<tr>
<th>Agency</th>
<th>Source of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCSA</td>
<td>Published Audited Financial Statements</td>
</tr>
<tr>
<td>Drug Rehabilitation Unit</td>
<td>Minimum approximation based on collected data(^9)</td>
</tr>
<tr>
<td>Glendairy Prisons</td>
<td>Minimum approximation based on data provided(^10)</td>
</tr>
</tbody>
</table>

\(^9\) See ‘Direct Government Expenditure on Demand Reduction’, Drug Rehabilitation Unit, for details of the approximation earlier in this section

\(^10\) See Appendix B for the estimation of prison costs

### Table 11. Template for Financial year 2000

<table>
<thead>
<tr>
<th>Activity(^1)</th>
<th>Agencies(^2)</th>
<th>Amount Spent(^1,3)</th>
<th>Activity(^4)</th>
<th>Agencies(^2)</th>
<th>Amount Spent(^1,3)</th>
<th>Activity(^4)</th>
<th>Agencies(^2)</th>
<th>Amount Spent(^1,3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply Reduction</strong></td>
<td></td>
<td></td>
<td><strong>Treatment</strong></td>
<td></td>
<td></td>
<td><strong>Demand Reduction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td>The Barbados Defence Force</td>
<td>Direct gov't payment for Tx</td>
<td>Community Progs</td>
<td>NCSA</td>
<td>$1,256,049</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Clinics</td>
<td>Tamarind House</td>
<td></td>
<td></td>
<td>$2,093,553</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Tx Centers</td>
<td>(NCSA Donation)</td>
<td></td>
<td></td>
<td>$35,137</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Hospitals</td>
<td></td>
<td></td>
<td></td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police</td>
<td>Royal B'dos Police Force</td>
<td>Tx Services Purchased by Gov't</td>
<td>a. Community Orgs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Private facilities</td>
<td>Teen Challenge</td>
<td></td>
<td></td>
<td>b. NGO's</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courts</td>
<td>Magistrates Court</td>
<td>b. NGO's</td>
<td></td>
<td></td>
<td>Verdun House</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High Court</td>
<td>(NCSA Donation)</td>
<td></td>
<td></td>
<td>$65,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Court of Appeal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrections:</td>
<td>for producers, traffickers, sellers (Persons on Drug Offences)</td>
<td>$416,446</td>
<td>Incarceration for Users:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Glendairy Prisons</td>
<td>a. Jails and prisons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crop Subsidies</td>
<td>b. Tx programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) See ‘Direct Government Expenditure on Demand Reduction’, Drug Rehabilitation Unit, for details of the approximation earlier in this section

\(^2\) See Appendix B for the estimation of prison costs
Discussion/Conclusions

The results of this baseline study could be described as mixed. On one hand, it brings into sharp focus the way in which money is spent by the Government to deal with the problem of drug demand reduction. On the other hand, it also shows that there exists very little recorded data or information on expenditure on certain aspects on drug control in Barbados.

The main aim of this study was to estimate direct Government expenditure on demand reduction activities in Barbados. In collecting the data for this it was found that the only institution that provides any meaningful financial data on expenditures is the National Council on Substance Abuse (NCSA). While this was no surprise, the reasons for this should be noted:

1. The NCSA was established with the very clear mandate of reducing the demand for drugs in Barbados. Hence all of its income (annual grant from government plus funding from approved sources), activities, and recording practices are structured and laid out within the context of its programmes such as school prevention, community prevention and others.

2. As a statutory body, the NCSA is required by law to conduct a financial audit and to report on its activities annually. Hence there is reliable set of clear and concise financial information that is consolidated and presented in the Annual Reports.

For these two main reasons it was relatively easy to determine the expenditure by government on prevention, education and research aspects of demand reduction.

The other major segment of demand reduction, treatment and rehabilitation, proved to be a less simple task. The Drug Rehabilitation Unit that is run by Government is physically located at the Psychiatric Hospital. What this also means is that the Unit shares the administrative structure at the hospital and the Ministry under which it falls. Hence the Estimates of Expenditure and other budgeting exercises of the government identify the *Psychiatric Hospital* as an institution for
which funds are provided, and there is no separate accounting for the Drug Rehab Unit. It was impossible therefore to obtain published figures or any other figures on expenditure specifically for the drug rehabilitation unit. What was obtained were figures on admissions, as well as various estimates of the unit costs of an inpatient day for the drug rehab unit. A 1995 report on the Health Sector Rationalisation Programme provides the most reliable estimate of $180 per patient day as the cost of inpatient services for the unit. Using this figure as a base, and adjusting for inflation, we were able to determine annual inpatient costs per patient. By multiplying this figure by the number of patients treated and making some assumptions, an estimate of annual expenditure on treatment was made.

The total of Bds. $3,349,602 that was estimated to be spent in 2000 is the best and most recent estimate of government expenditure on demand reduction in Barbados, but there is a declining trend overall as shown in figure 3. This figure however, is an underestimate since there was a lack of data on costs and numbers of persons that were treated on an outpatient basis. In addition to this, data on length of stay for inpatients was unavailable and this meant that expert opinion on average length of stay was used in the estimate of this figure. Despite these limitations, the exercise still provides a good baseline estimate on which to build.

**Level one Indicators**

**Number of Requests for Treatment at public and private institutions:**

The data provided for these institutions showed just how different their recording systems are. Information on requests for treatment was more difficult to obtain than that on admissions. Data on admissions then was provided as a proxy for this indicator except in the case of Teen Challenge, for which all of the data was provided.

**Number of drug-related deaths or serious injuries due to homicides, accidents, or suicides:**

This data is unavailable for Barbados. The key words for this indicator are *drug-related*. Homicides, accidents and suicide data will certainly be available, but it is difficult to determine whether drugs played a role unless it was explicit (e.g. drug overdose). There is no mandatory
testing of individuals for drug use who present at emergency rooms in Barbados. Hence there are no forensic nor toxicological sources of data on which data for this indicator can be based. Interestingly, persons who are involved in vehicular accidents do not have to be tested for alcohol and drug use, as is the case in other countries. So while details an accident would be recorded in police or hospital records, it is entirely possible that it may be drug related but not recorded as such. The best way to fill this gap within this context would be to implement a study of emergency rooms where expert opinions of the relationship of drugs and alcohol to a particular case can be recorded as the cases are presented.

Number of convictions and length of sentence for drug trafficking:

This data was obtained from the lone penal institution for adults in Barbados, Glendairy Prison.

Number of persons imprisoned for crimes or offenses connected with substance use (as cause or as consequence):

Unless the offence for which a person was imprisoned in Barbados was a drug offence then it is not possible to collect data on this indicator from existing records. The data provided for this indicator were for drug related offences except for trafficking. These include drug apparatus possession, drug possession, drug handling, drug importation and drug export. These are all drug related offences, but this indicator refers to all offences that occur. So a burglary, a murder, or a robbery may be drug related, but there is nothing in the records to indicate this. Drug addicts often steal to support their habit, but an addict would be charged with ‘burglary’, not ‘breaking and entering to support a drug habit’. It is interesting to note that there was only one individual according to prison records that was imprisoned for drug export from 1996 to 2002 and only four persons were imprisoned for cultivation during this period. This reinforces the fact that Barbados is not considered a producer or supplier of drugs. The data for this indicator will require a study to be done that will enable an estimate of drug attributable crime in Barbados to be made. There are three possible data sources for this indicator. One could be probation, prison and other records that may contain qualitative information on individuals that commit crime. These records however would fall short of
providing the quantitative data that is needed for cost estimation. The second possible source is
the International Arrestee Drug Abuse Monitoring Study\textsuperscript{11}, and the third source would be to
implement a representative study of the inmates of Glendairy prison.

\textbf{Determination of the validity of data supplied by the four countries on the standard form created}
\textbf{by Jeffrey Merrill on direct government spending:}

This information needed for this template is more readily available for demand reduction than for
supply reduction but there are serious data gaps in both sectors as was indicated before. There
are two fundamental data needs for cost estimation. These are aggregate costs and attributable
fractions [3]. Costs are derived by first evaluating the total costs of a particular activity such as
policing, corrections or the courts, and secondly by estimating the proportion of these costs that
are attributable to drug use (attributable fractions). Hence there is some work that needs to be
done before the template can be completed. By including the template as one of the level one
indicators, two things happen:

1. Persons are inclined to search for the information on direct government expenditure
   ‘directly’ without going through the process of collecting the fundamental data that is
   required. In fact, some of the fundamental data required for estimating the information
   required for the template appears in level two indicators. Hence the template is probably
   best placed among level two indicators.

2. It becomes a source of error since in most cases, the data required for the template does
   not exist in the \textbf{format} that is required by the template, and persons may use less than
   adequate secondary sources of data.

For these reasons several of the columns in the template, especially for supply reduction
activities cannot be filled because the information does not exist and no data is better than bad

\textsuperscript{11} This study is in progress and should yield some quantitative, qualitative and biological data on a group of persons who were arrested
data. The cost study will however provide guidance for the improvement of the information systems of the relevant institutions in the countries concerned.
**Recommendations**

- The list of indicators should be revised to strengthen particular indicators for which data is not routinely collected or readily available. These include level one indicators 2 and 4. The data for indicator 2 is not available in Barbados unless a detailed (and by implication costly) study is undertaken, hence the best proxy for this indicator at this time will be studies of emergency rooms.

- There should be an indicator that asks for data on aggregate expenditure to be collected. For example, the total expenditure of the country on policing would be a good indicator. Then the number of calls, operations, arrests and prosecutions (the police are responsible for prosecuting non-indictable offences in Barbados) that are attributable to drugs, would be the other indicator that would provide the attributable fractions from which costs could then be estimated. The estimation of attributable activities would be challenging, but it appears to be the best way to provide the information that is necessary.

- This study has indicated where several data gaps exist and should be used as a guide to the filling of these gaps in data. The single biggest limitation to these types of studies is the lack of data, and this will be true for other developing countries as well. It would be useful if some effort were made in devising a comprehensive list of required data and the sources of this data and incorporating these into a questionnaire. This will enable countries that undertake these studies in the future to be better able to determine what is available with out trial and error. An institution would be able to look at the list and probably fill out a short questionnaire on what they can provide. If this is one of the preliminary activities that are undertaken, then investigators will know where to go to get data, and which institutions need help in strengthening their information systems.

- Barbados will need to undertake an emergency room study to satisfy level one indicator 2, and a study of prisoners to satisfy level one indicator 4.

- A study will be needed to determine attributable fractions that are needed to calculate policing, enforcement, prisons, probation and other supply reduction related costs. The same type of study will be needed for hospital costs.
References


17. Single E. et al: The Costs of Substance Abuse in Canada: Highlights of a major study of the health, social and economic costs associated with the use of alcohol, tobacco and illicit drugs.


Appendix A

Indicators for the Cost Study

Level 1: Low-level complexity indicators (direct costs)

7. Number of requests for treatment at public and private institutions.
   The aim is to record all cases in which treatment was requested. Institutions normally have records of this type and the idea is to ensure that coverage in each country is as complete possible. This information can be obtained by letter, telephone, personal visit, or e-mail; however the latter two methods may be the most effective.

8. Number of drug-related deaths or serious injuries due to homicides, accidents, or suicides.
   The main source is the Coroner’s Office in each country, and sometimes the police. Normally this information is in the public domain and may be obtained at a single visit. It should not be forgotten that in the case of deaths there are three categories to be included: accidents (of any type, including overdose), suicides, homicides; in the case of injuries, all cases should be included that have been examined by the coroner or reported to the police as a result of any kind of violence or accident.

9. Number of convictions and length of sentence for drug trafficking.
   This includes persons convicted of distribution, sale, processing, or production of substances; persons on trial or arrested should not be included in this indicator.

10. Number of persons imprisoned for crimes or offenses connected with substance use (as cause or as consequence).
    This indicator concerns drug users or addicts who have committed offenses while under the influence of substances, or in order to obtain money to buy them.

11. Substance use studies in the general population, among students, or in the workplace.
    Refers exclusively to quantitative studies. In countries where no such studies exist the advisory team can help to find low-cost strategies for easy data collection.

12. Determination of the validity of data supplied by the four countries on the standard form created by Jeffrey Merrill on direct government spending.
The persons responsible for providing the information to CICAD should try to establish whether the data presented are supported by adequate studies, or if they are approximations made by extrapolation or by other methods.

**Level 2: Mid-level complexity indicators (direct costs)**

1. **Number of substance-use induced hospital admissions and length of stay.**
   Here it should be indicated what type of classification the countries are using to record cases (for example, ICD 9, ICD 10, other), and if the classification is unified in all institutions; concretely, this indicator refers to substance-use induced emergencies and poisoning, and length of hospitalization. Several countries may have difficulties with this indicator.

2. **Arrests for possession and use.**
   Includes three aspects:
   a. Number of persons arrested for possession and use in the past year.
   b. Number of persons involved, on average, in an arrest (police).
   c. Average duration of arrest for these reasons.
   This indicator may have different meanings in different countries: in some countries possession of any kind of illegal substance constitutes an offense; others recognize an amount for ‘personal use’; use restrictions may also vary (for instance, minors, public places).

3. **Number of persons undergoing treatment, type of treatment, and length of treatment.**
   A standard form will be prepared for presenting this information as there may be significant differences among countries: in some the most common form of treatment is therapeutic communities, with very long treatment times; in others, outpatient centers; and in still others internment for up to a month. Initially the data will refer only to institutions since data on private individual treatment are difficult to access.

4. **Destruction of physical assets.**
   This indicator basically deals with substance-use induced property losses; for the time being attempts to obtain information will focus only on two sources: information on automobile accidents from insurance companies and the police; and on fires from the fire service and the police. It should be mentioned whether or not laboratory tests have been carried out.
Level 3: High-level complexity indicators (indirect costs)

These indicators will be prepared in detail based on experience with the other two levels.

1. Follow-up on persons who have been in treatment (cost-effectiveness).
2. Methodology to determine labor productivity loss.
3. Premature death costs.
4. Absenteeism costs.
5. Social impact of property (tangible and intangible) loss.
6. Economic loss due to morbidity.
7. Opportunity cost due to psychoactive substance use.
Appendix B

Estimation of Costs of Incarceration for Prisoners convicted of Drug Offences$^{12}$

Prison Days

Using data on admission dates and release dates that was supplied by Glendairy Prisons, the number of prison days for the year 2000 was calculated for prisoners on drug offences. The total number of prison days for a particular period of time is simply the sum for all prisoners of the number of days spent by each in prison. The total number of prison days for persons on drug offences in 2000 was 13,305 days.

Cost Estimates

In a 1997 report on alternatives to imprisonment in Barbados [21], the cost of maintaining a prisoner at Glendairy Prison was estimated using a top down method. The total expenditure per annum was allocated to the number of prisoners in the institution. The estimated cost per day of maintaining a prisoner was reportedly $28.30 per day in 1996. This figure was adjusted using inflation to estimate the cost per day in the year 2000.

Table 3. Adjustment of Estimated Average Cost of a Prison-day Using Inflation

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflation Rate$^{13}$</th>
<th>Adjusted Cost of Prison Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>Baseline</td>
<td>$28.30</td>
</tr>
<tr>
<td>1997</td>
<td>2.4%</td>
<td>$28.98</td>
</tr>
<tr>
<td>1998</td>
<td>7.7%</td>
<td>$31.21</td>
</tr>
<tr>
<td>1999</td>
<td>-1.2%</td>
<td>$30.84</td>
</tr>
<tr>
<td>2000</td>
<td>1.5%</td>
<td>$31.30</td>
</tr>
</tbody>
</table>

Hence the figure of $31.30 will be used as an estimate of the cost of a prison day in the year 2000. The total expenditure in 2000 on prisoners convicted of drug offences is calculated simply as follows:

---

$^{12}$ Not to be confused with prisoners convicted of drug-related offences

$^{13}$ Taken from official Barbados Central Bank statistics
(Total prison days x Estimated cost of a prison day)

= 13,305 x $31.30
= $416,446.00.

Hence the estimated expenditure in the year 2000 on persons convicted of drug offences was Bds $416,446.00.
Appendix C

TEMPLATE FOR CALCULATING DIRECT GOVERNMENT EXPENDITURES
(Should be for most recently completed fiscal year for which there is data)

Supply Reduction

<table>
<thead>
<tr>
<th>Activity</th>
<th>Agencies</th>
<th>Amount Spent¹³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrections:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
for producers, traffickers, sellers    |
| Crop Subsidies                  |

Treatment

<table>
<thead>
<tr>
<th>Activity</th>
<th>Agencies</th>
<th>Amount Spent¹³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct gov't payment for Tx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Clinics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Tx Centers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Hospitals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Demand Reduction

<table>
<thead>
<tr>
<th>Activity</th>
<th>Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Programs</td>
<td></td>
</tr>
</tbody>
</table>

Prevention

<table>
<thead>
<tr>
<th>Activity</th>
<th>Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>a. Community Orgs.</td>
<td></td>
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<tr>
<td>b. NGO's</td>
<td></td>
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<tr>
<td>c. Media (e.g., ads)</td>
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</tbody>
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Notes:

1. These involve only direct expenditures related to either the reduction in supply or demand for substances. For example, this would not include the whole military budget, but only those expenditures for such items as the interdiction, seizure or destruction of drugs. For treatment, this would only include the direct costs of treating a substance problem and no the indirect costs of treating diseases that may be caused or exacerbated by the use of a substance (e.g., IV heroin use and AIDS; or Tobacco and Lung Cancer).
2. May include more than one agency involved in a given activity. All agencies should be included and listed separately.
3. In local currency.
4. Only include those expenditures made by the government to pay directly for an activity or to purchase that government service from some other source.