

**CARMEN IN THE CARIBBEAN: CARLI**

**CARIBBEAN LIFESTYLE INTERVENTION PROGRAM  
BLUEPRINT FOR ACTION**

**PAHO/WHO Office of Caribbean Program Coordination, Barbados  
in collaboration with  
The Non-communicable Disease Program  
PAHO/WHO Washington, D.C.**



**Pan American Health Organization/World Health Organization  
Office of Caribbean Program Coordination  
Barbados**

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**INTRODUCTION**

Over the past decade, non-communicable diseases (NCDs) have been major causes of death and illness worldwide. NCDs contribute to 70% of the total burden of disease in Latin America and the Caribbean<sup>1</sup> and it is estimated that by the year 2015 there will be 7 deaths due to NCDs for every death attributable to infectious and parasitic diseases<sup>2</sup>. Deaths from chronic diseases are expected to double in Latin America and the Caribbean by 2020, by which time they may account for 76% of all deaths in the region<sup>1</sup>. Low and middle income countries suffer the greatest impact of NCDs and the rapid increase in these diseases is sometimes seen disproportionately in poor and disadvantaged populations, contributing to widening health gaps between and within countries. In 1998, of the total number of deaths attributable to NCDs, 77% occurred in developing countries and of the disease burden that they represent, 85% was borne by low- and middle-income countries<sup>3</sup>.

Thus, NCDs represent a significant burden on the public health services of PAHO/WHO Member States and have the potential to negatively affect their development. The problem is particularly challenging for low- and middle-income countries which still have to contend with the unfinished agenda of communicable diseases<sup>4</sup>. The most prevalent NCDs in the Region of the Americas, which include cardiovascular disease, hypertension, diabetes and cancer, are linked by common risk factors. These include obesity, physical inactivity, poor nutrition and tobacco use, factors which are related to lifestyle, are potentially preventable and can be addressed in an integrated fashion.

There is ample evidence that that interventions addressing NCDs can be effective. In 1992, *The Victoria Declaration on Heart Health* made it clear that the knowledge required to prevent most cardiovascular diseases already exists. Three years later, *The Catalonia Declaration: Investing in Heart Health* presented a number of concrete approaches and experiences that were based on effective interventions undertaken at the national, regional and local levels in countries all over the world<sup>5</sup>.

Decisions made outside the health sector often have a major bearing on elements that influence the risk factors. More health gains in terms of prevention are achieved by influencing public policies in domains such as trade, food and pharmaceutical production, agriculture, urban development and taxation policies than by changes in health policy alone. Experience indicates that the success of community-based interventions requires community participation, supportive policy decisions, intersectoral action, appropriate legislation, health care reforms and collaboration with non-governmental organizations, industry and the private sector<sup>3</sup>.

In an effort to address NCD prevention and control, the World Health Organization (WHO) European Region developed the Countrywide Integrated Non-communicable Disease Intervention (CINDI) program, which was implemented in several European countries in the 1980s. Subsequently, the Pan American Health Organization (PAHO) adapted CINDI for the Americas and called the program CARMEN – Conjunto de Acciones para la Reduccion Multifactorial de Enfermedades No transmisibles (Actions for the Multifactorial Reduction of Non-communicable Diseases).

The goal of the CARMEN program is to improve the health status of the population by reducing the prevalence of the risk factors associated with non-communicable diseases. This is attained through integrated health promotion and disease prevention at the community level and through the health care services. CARMEN addresses all risk factors associated with NCDs and non-intentional injuries, including biological conditions, unhealthy consumption behaviours, absence of promotive or protective behaviours, inadequate use of preventive or screening devices and psychosocial factors. However, the specific risk factors that each CARMEN program addresses are based on a situational analysis and the priorities of each country<sup>6</sup>.

The Pan American Network of CARMEN Programs was created in 1997 with the participation of Chile and Canada. In 1999, Costa Rica, Cuba and Puerto Rico joined the network and five other countries – Argentina, Brazil, Colombia, El Paso/USA and Uruguay – have been participating as observers while they finalize the formal process of preparing a national protocol.

## **CINDI/CARMEN PRINCIPLES**

The essential principles of CINDI, adopted and adapted by CARMEN, are<sup>6,7</sup>:

*Integrated action.* Such action implies intervention aimed at simultaneously reducing a set of risk factors common to NCDs, at the individual and community level. Through combined efforts of preventive health care services for high risk individuals and health promotion intervention directed towards the general population.

*Intersectoral action.* Closely linked to integration is the need to foster collaboration by means of intersectoral action. As noted, many of the determinants of health lie outside the purview of the health sector. There are social, economic and environmental factors that affect health and the involvement of other sectors and civil society in efforts to improve population health is crucial to success. The establishment of an intersectoral coordinating committee and consensus building usually facilitates this action.

*Population-based research.* Research into the prevalence of NCDs, their risk factors and related socio-economic, cultural and political issues, with disaggregation of the data by age, sex, geographical area and other variables:

- allows the determination of priorities;
- facilitates evidence-based policy development and program planning;
- permits identification of the main target groups and analysis of inequities and gender issues that may need to be addressed;
- informs the development of specific objectives of the program and indicators of their achievement; and
- provides a baseline for the monitoring and evaluation of interventions.

*Community-based interventions.* These offer the opportunity for action at both community and individual levels through existing health systems, allowing both levels to take responsibility for their health. The involvement of the primary health care system is a key strategy and the development, implementation and evaluation of the interventions facilitates capacity building in the community and nationally. The active participation of communities and individuals, using available resources and mobilizing additional resources as needed, is a major predictor of success. Demonstration projects can point the way to improvement and replication at local and national levels.

*International collaboration.* This is seen as a mechanism to exchange experiences among countries and to raise the visibility and priority of NCDs. The Pan American Network of CARMEN Programs enhances international collaboration, especially as it is linked to the international web of CINDI projects.

*Monitoring and evaluation.* These allow detection of trends, modification of the program as necessary to improve efficiency and effectiveness and, eventually, assessment of impact. It is important to conduct process, as well as impact, evaluation, documenting successes and failures along the path to the achievement of the objectives. The articulation of indicators of achievement of the objectives in the planning stage and the early allocation of resources for monitoring and evaluation, as well as implementation, are important for the process to proceed efficiently.

## **OPERATIONAL STRATEGIES FOR CARMEN**

In common with CINDI, its forerunner and continuing collaborative partner, the CARMEN program seeks to integrate health promotion and disease prevention strategies in interventions aimed at reducing NCD risk factors at community and national levels. It is recognized that improvements in population health do not result only from health services, which have a curative focus, but also from health promotion and prevention of disease, through the creation of socioeconomic, physical and cultural environments that promote health and enable the choice of healthy lifestyles<sup>7</sup>.

The following operational strategies are used to implement interventions<sup>6</sup>:

- Policy development and legislation to attain consensus among relevant partners on the issues to be addressed and to coordinate their efforts.
- Development and implementation of national practice guidelines that lead to better and more cost-effective management of risk factors and early identification of disease by health professionals, predominantly at the primary care level.
- Professional education to improve the skills of health professionals, increase their involvement in preventing NCDs and help to re-orient health services towards prevention.
- Public health education and social communication to advocate for policy changes, support the implementation of lifestyle changes and facilitate the creation of healthy environments and the re-orientation of health services.
- Marketing of CARMEN to rally political, corporate and social support for the program.
- Development of a formal management structure for the program based on the concept of “partnership” characterizing the coalition approach.
- Monitoring, impact and process evaluation.

In general, the following stages are necessary for country participation in the CARMEN network<sup>7</sup>:

1. A situation analysis
2. The establishment of a national committee and a coordinator for the program
3. The development of a national protocol and plan of action
4. The formulation of guidelines and methods of intervention for the common risk factors
5. A baseline study
6. Initiation of the intervention
7. Meetings of the national program directors and their participation in international meetings of CARMEN/CINDI
8. Joint evaluation every 5 years
9. The further development and implementation of a national CARMEN program



The experiences of the CARMEN countries to date indicate that the network has provided opportunities to:

- build capacity at community and national levels;
- improve mechanisms for effective multi-sectoral collaboration and partnerships;
- use the CARMEN network as a means of sharing information and experiences and mobilizing resources; and
- develop a framework and tools to address NCD prevention and control.

The aim of this blueprint is to suggest how the CARMEN program may be adapted for implementation in another sub-region of the Region of the Americas – the English-speaking Caribbean (ESC). It will suggest how the program may be modified to suit the sub-regional and national realities without losing its essence and the characteristics that will facilitate comparisons with CARMEN in the wider Region of the Americas and CINDI in Europe.

In February 2001, PAHO convened a meeting in Barbados of NCD stakeholders to initiate the development of a strategic sub-regional plan for NCD prevention and control in the Caribbean. At the meeting it was agreed that a CARMEN-like initiative in the Caribbean would be a valuable contribution to NCD prevention and control in the sub-region. The name agreed on for CARMEN in the Caribbean was CARLI – the Caribbean Lifestyle Intervention program<sup>8</sup>. The meeting also decided that CARLI should address not only risk factors for NCD – that is, primary prevention – but also early detection and treatment (secondary prevention) and treatment and rehabilitation (tertiary prevention).

Thus, the CARMEN/CARLI principles and strategies would be applied to all levels of NCD prevention and control, emphasizing enabling factors for the adoption of healthy lifestyles and behaviours by the general population, persons at risk of the disorders and persons who have already developed the disorders.

## JUSTIFICATION FOR CARLI

The countries suggested for inclusion in CARLI are those which together constitute the majority of the member countries of the Caribbean Community, CARICOM. The countries are predominantly English-speaking, but include a Dutch-speaking country, Suriname. The nineteen (19) countries suggested for involvement are: Anguilla\*, Antigua & Barbuda, The Bahamas, Barbados, Belize, Bermuda\*, British Virgin Islands\*, Cayman Islands\*, Dominica, Grenada, Guyana, Jamaica, Montserrat\*, St. Kitts & Nevis\*, Saint Lucia, St. Vincent & the Grenadines, Suriname, Trinidad & Tobago and Turks & Caicos Islands\*.

These countries have a combined population of about 7.1 million and include three mainland countries (Belize, Guyana and Suriname) and island states that vary in size and population from Anguilla (91 km<sup>2</sup> and 8,000 population) to Jamaica (11,424 km<sup>2</sup> and 2.6 million population). There are ethnic and cultural variations within and among the countries, though they have common issues to deal with, especially in terms of intersectoral actions to address priority health problems, health sector reform and demographic and epidemiological transitions.

Among the demographic changes in the Caribbean are increases in life expectancy and the proportion of older persons in the population, changes that will result in an increase in the prevalence of NCDs. The proportion of elderly (persons over age 60) in the population of the non-Latin Caribbean was 4.3% in 1950<sup>†</sup>. By the year 2025, the elderly in the non-Latin Caribbean will constitute approximately 10.4% of the total population, compared with 9.2% in Latin America and 18.5% in North America<sup>9</sup>. It is also significant that by 1995 some countries had exceeded predictions for the year 2000 – in Jamaica the proportion is already 10.6%<sup>7</sup> and in Barbados the proportion of persons over age 65 is approximately 11%<sup>10</sup>.

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\* British Overseas Territories

† The non-Latin Caribbean excludes Cuba, Dominican Republic, Haiti and Puerto Rico, but includes the Guianas - French Guiana, Guyana and Suriname - and the rest of the ESC

Non-communicable diseases are the main causes of death in the ESC. An analysis of mortality data from the ESC for the period 1980-1990, published by the Caribbean Epidemiology Centre in 1995, indicated that the main causes of death were cardiovascular disease, malignant neoplasms, diabetes and hypertension<sup>11</sup>. Increasing prevalence of obesity and diabetes<sup>12,13,14</sup> and high prevalence of hypertension<sup>12</sup> in the sub-region have been documented. Recent studies indicate diabetes prevalence among adults of 17% in Barbados<sup>12</sup> and 18% in Jamaica<sup>13</sup>, with a hypertension prevalence of 45% in adults in Barbados<sup>12</sup>. National nutrition surveys undertaken in Barbados between 1970 and 1981 showed that the prevalence of overweight (20% greater than ideal body weight) increased from 7% to 19% in males and from 32% to 39% in women<sup>14</sup>.

In the Region of the Americas, mortality from diabetes mellitus increased dramatically in terms of the number of deaths and total years of potential life lost (YPLL), especially among the population over 25 years old. The increase was most evident in the sub-region that had traditionally had the highest mortality from this cause, namely the English-speaking Caribbean. Diabetes-related deaths for this sub-region in 1994 had increased 147% over their 1980 level and represented the third leading cause of YPLL among women and the tenth among men<sup>15</sup>.

There have been initiatives and interventions to address NCD prevention and control in the ESC for many years, but they are, in general, done with minimal collaboration and cooperation among NCD stakeholders at national or sub-regional level and often have a clinical or curative focus. Currently in the ESC there are many persons, agencies and organizations working in NCD prevention and control, and they are becoming increasingly aware of the need to address the issues in a more coordinated, organized and systematic way in order to minimize duplication of activities and maximize the use of national and sub-regional resources.

Many countries are struggling to develop NCD programs and identify mechanisms to integrate them into their policies, plans, programs and structures. **CARLI could provide one such mechanism.** Both WHO and PAHO have identified NCD prevention and control as a major area of work and are prepared to offer their Member States assistance in dealing with the issues. WHO recognized the global threat posed by NCDs and the need to provide an urgent and effective public health response in 1998.

A Global Strategy for the Prevention and Control of Non-communicable Diseases was developed, endorsed by the WHO Executive Board in January 2000 and approved by the World Health Assembly in May 2000, through Resolution WHA53.17. The Resolution urged Member States to, among other things, “promote community-based initiatives for prevention of non-communicable diseases, based on a comprehensive risk factor approach”. It also requested the Director-General “to continue giving priority to the prevention and control of non-communicable diseases, with special emphasis on developing countries and other deprived populations”<sup>16</sup>.

In 1997 PAHO’s Executive Committee passed a resolution that recommended strengthening technical support for specific initiatives aimed at the prevention and control of NCDs and the CARMEN network was formed. A submission was made to the meeting of the Forty-second Directing Council in September 2000 on the topic of cardiovascular disease, especially hypertension, in which its prevention and control was put in the context of an approach that integrates health promotion, primary prevention and management of NCDs. This approach was based on the fact that these health problems share risk factors and control strategies and that action should target the same population groups<sup>17</sup>.

The Directing Council responded by adopting Resolution CD42.R9, urging Member States to “update their health policies to strengthen and prioritize community and health service interventions, especially in primary care, that will lead to the prevention and control of cardiovascular disease and hypertension in particular”.

The Resolution also requested the Director to “establish the necessary measures for the mobilization of technical cooperation resources that will permit the creation or strengthening of national plans for the prevention and control of hypertension within the framework of an integrated strategy for the prevention and control of non-communicable diseases”<sup>18</sup>.

The English-speaking Caribbean countries and Suriname are Member States of both WHO and PAHO. The expressed intent of these intergovernmental, international organizations to give priority to NCDs, which is a response to the needs of their Member States and which the latter have endorsed, provides a powerful incentive for national and local action in the countries.

With the development of CARLI, these countries will have access to the considerable technical resources provided by WHO/PAHO, to the larger network involving WHO/PAHO Collaborating Centres and perhaps, to financial resources, or at least to mechanisms for mobilizing them.

At a sub-regional level, the ESC countries and Suriname are members of CARICOM and in 1997, CARICOM Member States accepted and endorsed the Caribbean Cooperation in Health Phase II (CCH II) initiative. Through CCH II, the countries agreed to “collectively focus action and resources over a given period towards the achievement of agreed objectives in priority health areas of common concern” and “identify the approaches and activities for joint action and/or Technical Cooperation among Countries (TCC) in support of capacity building for the achievement of the objectives”<sup>19</sup>. One of the eight priority areas in CCH II is Chronic Non-communicable Diseases and a sub-priority area is Risk Factor Prevention and Control, providing another justification for the introduction of CARLI.

Other benefits that would accrue to the countries from the introduction of CARLI include:

- **Building national capacity.** This is crucial for many of the countries, given the limited human and financial resources available. CARLI offers the opportunity to increase capacity in coalition building and establishing effective; priority setting; research methodology; policy formulation; evidence-based planning; intervention strategies; and monitoring and evaluation.
- **Availability of tools for action.** Documents and toolkits have already been produced, or are being produced, through the CARMEN and CINDI programs. There is no need to “start from scratch” with CARLI, as the available materials can be examined and adapted for the Caribbean as necessary.
- **Sharing the experiences of the CARMEN countries.** Caribbean countries would be able to learn from the CARMEN network, as many of them are in similar positions regarding the coexistence of NCDs and communicable diseases as priorities in settings with limited resources. As importantly, many of the CARMEN countries are undertaking health sector reform and a similar process is occurring in several Caribbean countries.

CARMEN countries may provide examples of mechanisms for incorporating the integrated approach to NCD prevention into the health sector reform process.

- **Improvement in population health.** In the long-term, should CARLI be successfully implemented, the interventions effectively replicated and national and political catastrophes avoided, Caribbean countries would see decreases in NCD risk factors and NCD prevalence.

## **FACILITATING FACTORS FOR THE INTRODUCTION OF CARLI**

The Caribbean is fortunate to have many institutions, agencies and organizations at sub-regional and national levels that could be partners and resources for the CARLI program. Additionally, work which has been proceeding in NCD prevention and control, albeit not as systematically and organized as it could be, can be built on in this initiative.

Facilitating factors for CARLI include:

### 1. Existing institutions that may be possible partners:

- Ministries of Health, Education, Social Services, Labour. Within Ministries of Health are:
  - Health Education Units;
  - NCD focal points;
  - Health and Family Life Education Coordinators (*vide infra*); and
  - Health Information Units.
- Specific ministries or divisions in some countries that deal with community development, which could provide entry points for discussions with community leaders and conducting community assessments. Some countries have ministries that deal with women/gender issues and could be useful if women are determined to be a target population.

- CARICOM Institutions:
  - The CARICOM Secretariat (Guyana), which liaises with top decision makers in the countries, including Prime Ministers and members of Cabinet;
  - The Council on Human and Social Development, COHSOD, an intersectoral body comprising Ministers from the social sectors, including Health;
  - The Caribbean Environmental Health Institute, CEHI (Saint Lucia); and
  - The Caribbean Health Research Council, CHRC (Trinidad & Tobago).
- PAHO/WHO offices in The Bahamas, Belize, Guyana, Jamaica, Suriname and Trinidad & Tobago, which provide technical cooperation to the respective countries.
- PAHO/WHO Office of Caribbean Program Coordination (CPC), which provides technical cooperation to Anguilla, Antigua & Barbuda, Barbados, the British Virgin Islands, Dominica, Grenada, Montserrat, Saint Lucia, St. Kitts & Nevis and St. Vincent & the Grenadines.
- PAHO specialized centres in the ESC:
  - The Caribbean Epidemiology Centre, CAREC (Trinidad & Tobago) and
  - The Caribbean Food and Nutrition Institute, CFNI (Jamaica)
- PAHO Regional NCD program, based in Washington, D.C.
- Other UN agencies e.g. International Children's Fund, UNICEF; Women's Development Fund, UNIFEM; and the International Labour Organization, ILO.
- University of the West Indies (UWI):
  - Tropical Medicine Research Institute, TMRI, comprising the Medical Research Council (Jamaica), the Tropical Metabolism Research Unit, TMRU (Jamaica); and the Chronic Disease Research Centre, CDRC (Barbados);
  - Sir Arthur Lewis Institute for Social and Economic Studies, SALISES, at the three campuses – Barbados, Jamaica and Trinidad & Tobago;
  - Centre for Gender and Development, Barbados; and
  - Women and Development, WAND, at the three campuses.
- Non-Governmental Organizations e.g. Diabetes Associations, Cancer Societies, Heart Foundations/Associations.

- Private sector e.g. insurance companies.
- Professional associations, e.g. of doctors, nurses, pharmacists.
- Media workers' associations and media houses.
- Community groups, e.g. churches, youth groups and women's groups.

2. Ongoing programs and initiatives:

- HFLE program, being implemented in schools, which aims to impart life skills to youth and adolescents;
- Healthy Schools/Project Lifestyle, being implemented in schools through CFNI;
- Workers' Health;
- NCD programs in development (vide infra);
- Substance abuse prevention and control; and
- Reproductive health.

3. Existing frameworks and guidelines, including:

- Caribbean Charter for Health Promotion – CARICOM/PAHO;
- Caribbean Cooperation in Health, Phase II - CARICOM/PAHO;
- Model Policy for the Prevention and Control of Diabetes in the Caribbean – PAHO CPC;
- Guide for the Development of Diabetes Prevention and Control Programs in the Caribbean – PAHO CPC;
- Management of Diabetes in Primary Care – CHRC;
- Management of Hypertension in Primary Care in the Caribbean – CHRC; and
- Outline of Draft Strategic Plan for Mental Health in CCHII – PAHO CPC.

CARLI could be a pilot for the suggested inclusion of mental health in CARMEN, using elements from the plan, which was developed in June 2000. In keeping with the preventive focus of CARMEN and activities initiated in a few countries, CARLI could incorporate the pilot program for inclusion of community-based efforts to reduce the stigma of mental illness and promote mental health.



4. The use of diabetes as entry point for NCD prevention and control. Just as Canada has used heart health as the entry point to integrated NCD prevention and control, the ESC and Suriname have been encouraged, through PAHO's technical cooperation, to use diabetes in similar fashion. In 1997 the COHSOD accepted diabetes as a public health issue<sup>20</sup> and through technical cooperation during the 1998/99 biennium, ten (10) Caribbean countries developed draft diabetes prevention and control programs. However, these programs need to be finalized and implemented and **CARLI offers the possibility to operationalize at least some of the program elements.**
  
5. Health sector reform (HSR), with its principles of equity, efficiency, effectiveness and quality, sustainability and social participation<sup>21</sup>, offers opportunities to develop explicit policies and plans for NCD prevention and control, define the role of primary health care and identify the resources needed and their sources. HSR has so far concentrated on economic efficiency and has relegated matters of equity, social protection in health and public health to a secondary plane. The quality of care, and more concretely, the model of care, have been marginal topics in the debate on reform in most countries<sup>19</sup>.

Even with the concentration on financing mechanisms, those for interventions aimed at prevention are not usually well defined, as greater focus is traditionally given to curative services. Decentralization and social participation, two of the contents of the HSR process in most countries in the Region of the Americas, facilitate coalition building at local level and CARLI can provide further impetus to these initiatives.

6. Agreements reached at CARMEN Directors' Meeting held in Dartmouth, Halifax, November 2000, which will provide support to the introduction of CARLI. These include development of:
  - A framework policy document for CARMEN;
  - A sub-project on Gender and NCD prevention;

- A network of WHO Collaborating Centres, to offer greater support to the program;
- A mechanism for the inclusion of mental health in CARMEN; and
- Technical cooperation among countries (TCC) projects among demonstration sites to mobilize resources.

Having outlined these facilitating factors, a cautionary note must be sounded. Many of the institutions, agencies and organizations are not structured in ways that easily permit joint planning and partnerships. Each has its own agenda and the geographic separation of the ESC and Suriname makes collaboration and effective partnerships that much more difficult. It will be necessary for all concerned to:

- Focus on common, agreed-on long-, medium- and short-term objectives;
- Learn and use coalition-building and communication skills;
- Identify roles and responsibilities that overlap as little as possible; and
- Use modern technology to communicate effectively.

The development, implementation and evaluation of a strategic sub-regional plan for NCD prevention and control, with identified goal, purpose, objectives and indicators of achievement and the roles and responsibilities of various stakeholders, will go a far way to ensuring the needed collaboration and cooperation. The process has already begun<sup>6</sup>.

## **CARLI-SPECIFIC ADJUSTMENTS TO CARMEN**

### **Principles**

Thus, the principles outlined above for CARMEN (see page 3) are all applicable to CARLI, but an important addition under *Integrated action* is:

- Integration of CARLI principles and activities into ongoing and planned programs for the Caribbean which are being executed by Caribbean countries, sub-regional institutions, international technical cooperation agencies, non-governmental organizations and the private sector.

These programs include, but are not limited to, NCD prevention and control, adolescent health, health and family life education, substance abuse prevention and control and reproductive health.

### **Operational strategies**

Similarly, the operational strategies for CARMEN (see page 5) are applicable to CARLI, but:

- Under “development and implementation of national practice guidelines”, it should be stated that not only management of risk factors and early identification of disease will be addressed, but also management of persons with the disorders;
- Under “public education and social communication”, partnerships with the media should be explicitly mentioned; and
- Under “marketing of CARMEN”, media partnerships should again be specified.
- Under “development of a formal management structure for the program”, the pre-eminence of national organizational and management structures, the need for national resources to be allocated to the program and the role of PAHO as facilitator only should be emphasized.
- An addition should be “Identification and implementation of resource mobilization mechanisms at national level”.

### **THREATS TO THE SUCCESS OF CARLI**

As has been alluded to above, there are factors, which if not addressed effectively, can hinder the success of this initiative in the ESC and Suriname. These factors include:

- The need for greater appreciation, by decision- and policy makers, of the impact of NCDs on the health of the population and national development, taking into account not only death and illness, but also the economic burden.
- The need for greater appreciation, by decision- and policy makers, health professionals and the public, of the need to address prevention and early detection and treatment of disease. These persons are used to, and demand, an emphasis on treatment and rehabilitation (tertiary care).

- Limited human and financial resources. Many persons are already “multi-tasking” and there are difficulties in finding persons already trained to do necessary tasks.
- Inadequate infrastructure within some Ministries, NGOs and professional associations, which will inhibit their full, efficient and effective participation in coalitions and partnerships.
- Traditional media focus on illness and death, rather than wellness and quality of life. Although this is changing and prevention, health and wellness are increasingly being seen as “news”, greater effort in this regard is needed in the ESC.

## **STRATEGIES FOR THE INTRODUCTION OF CARLI**

Given the discussion above, it will be necessary to identify strategies for the introduction and establishment of CARLI in the ESC and Suriname. Such strategies should be identified through a participatory process, initially involving a group representing core stakeholders (e.g. PAHO/WHO, CARICOM Secretariat, selected Ministries of Health, UWI, selected NGOs, Media). This core group would suggest strategies and then seek wider input before final decisions and implementation.

This blueprint suggests that strategies should include:

- Review of the CARMEN/CINDI program and detailed suggestions for its adaptation for the Caribbean, based on
  - examination of the CARMEN/CINDI protocols and guidelines, with subsequent development of CARLI protocols and guidelines (**a suggested outline for the CARLI protocol is annexed**);
  - the experiences of the participating countries, to date; and
  - consideration of issues raised in this blueprint.

- Social marketing of CARLI. It will be essential to convince politicians, other decision- and policy makers, health professionals, organizations, communities and the public of the value of health promotion and disease prevention and how CARLI can help. Mechanisms to obtain their endorsement and support must be planned and implemented and the development of an advocacy strategy will be an important step.
- Building coalitions and partnerships through involvement of NGOs and other partners interested not only in planning, but also in intervention. There should be explicit intersectoral collaboration and definition of the organizational structure and terms of reference in which coalitions and partnerships will operate.
- Use of research instruments already developed, adapting as necessary and involving agencies such as CDRC, CHRC and CAREC in conducting research and training nationals. Research on the economic impact of NCDs and their risk factors should be included.
- Development and implementation of a priority setting process for CARLI interventions, with identification of objectives and indicators.
- Incorporation, as indicated, into ongoing and planned programs, based on the results of the priority setting process, with identification of mechanisms for monitoring and evaluation. This includes incorporation of suggested CARLI elements into the Caribbean NCD strategic plan which will be developed, within the framework of the CCH II, over in 2001-2002, through technical cooperation from PAHO/WHO.
- Active cooperation with CARMEN/CINDI programs implemented in other sub-regions, through information sharing, exchange of personnel and visits to demonstration project sites.
- Development of TCC projects with CARMEN programs, to facilitate resource mobilization.
- Early identification of national resources for the CARLI program and mechanisms for resource mobilization.

## **OUTLINE OF SUGGESTED PROJECT FOR ESTABLISHMENT OF CARLI**

The timelines below are subject to change.

### **Goal:**

Prevalence of NCD risk factors, NCDs and their complications in selected English-speaking Caribbean countries decreased.

### **Purpose:**

Caribbean Lifestyle Intervention (CARLI) program established in selected Caribbean countries.

### **Expected Results:**

1. Participatory process for adapting CARMEN for the Caribbean (CARLI) initiated.

#### **Indicators:**

- Meeting of core stakeholders held by end 2001.
- Terms of reference for adaptation of CARMEN for the ESC and Suriname developed by end 2001.

2. Social marketing mechanisms for CARLI planned and implemented.

#### **Indicators:**

- Advocacy strategy for CARLI developed and implemented at sub-regional level by end 2001.
- Feasibility of introducing CARLI determined in 2 countries by end 2002.

3. Policy framework developed for CARLI.

#### **Indicator:**

- Policy framework for CARLI, based on CARMEN policy framework, and disseminated to countries by end 2002.

**Activities and Inputs/Resources: To be developed.**

## CONCLUSION

The English-speaking Caribbean and Suriname have not avoided the epidemiological transition taking place in many regions of the world. Non-communicable diseases, with risk factors closely related to behaviour and lifestyle, have become the major causes of death and illness, overall, even as some communicable diseases continue to pose threats to health. There is need for countries to take action against NCDs and try to achieve successes comparable to those achieved against several communicable diseases.

It is recognized that the impact of actions taken against non-communicable diseases is long-term, but it is advised that political directorates and those concerned with the people's health consider well the unacceptable cost of not taking effective action and allowing present trends to continue. Given the demographic trends in the sub-region, with increases in life expectancy and the increasing proportion of elderly in the population, NCDs are likely to remain priorities for a long time. Countries cannot afford to be passive in the face of this epidemic.

The development of specific indicators of achievement in the short-, medium- and long-term and implementation of relevant monitoring mechanisms will allow measurement of interim successes, such as capacity building, as countries move towards impact. Such impact will best be achieved through the integration of health promotion and disease prevention approaches to ensure that strategies related to promotion of health and prevention and cure of disease are applied to solve the problems caused by NCDs.

The proposed introduction of the Caribbean Lifestyle Intervention (CARLI) program into the English-speaking Caribbean and Suriname will not only benefit the countries of the sub-region. It will also be another step in fulfillment of the WHO global strategy of developing a network of national and regional programs for the prevention and control of NCDs, in order to disseminate information, exchange experiences and support regional and national initiatives. It is hoped that in due course, CARLI will take its place as an integral part of the NCD control network in the Americas and facilitate the global effort to prevent and control non-communicable diseases.

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**ANNEX**

## ANNEX

### SUGGESTED CONTENTS OF PROTOCOL FOR CARIBBEAN LIFESTYLE INTERVENTION (CARLI) PROGRAM

Based on the CINDI Protocol and Guidelines<sup>1</sup>, with adaptations based on feedback received on previous drafts of this Blueprint and issues discussed at CARMEN Directors' meetings, the CARLI Protocol would comprise:

1. Justification for the CARLI program, including a situation analysis and selection of diseases/risk factors to be targeted.
2. CARLI objectives and policy framework, indicating target groups, specific issues within the priority areas, expected results and indicators of their achievements, main program features, central policy issues, key intervention strategies, national resources for the program and resource mobilization mechanisms.
3. Key intervention strategies, which may include, depending on the disorders/issues to be addressed and the objectives:
  - Policy development, legislation and coordination
  - Research
  - Public education and the mass media
  - Guidelines for practice and continuous quality improvement
  - Professional education and involvement

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<sup>1</sup> WHO Regional Office for Europe. Protocol and Guidelines, Countrywide Integrated Noncommunicable Diseases Intervention Programme. Copenhagen: 1996, EUR/ICP/CINDI94.02/PB04.

## ANNEX

### 4. Promotion, coordination, monitoring and evaluation of the program, including:

- Marketing and advocacy strategies
- Indicators and data sources
- Process evaluation
- Data management
- Impact evaluation

### 5. Organization and management of the program, including:

- Development of the organizational structure, including the creation of intersectoral networks and partnerships and relevant terms of reference
- Guidelines and practical suggestions for program implementation, based on the experiences and best practices of CINDI and CARMEN countries and emphasizing national structures, systems and resources
- Organization and management resources, including:
  - PAHO's facilitating role
  - The potential for technical cooperation among countries (TCC) in the CINDI/CARMEN network
  - CINDI/CARMEN policy and management organs, including CARMEN Directors' Meetings; CARMEN Working Groups; member countries with Collaborating Centres; the CINDI Data Management Centre; and CINDI resource centres
- Membership policy
- Publication policy
- Provision of information about CARLI to stakeholders on a regular basis
- Participation in the CINDI/CARMEN network
- Regular review of the management of the CARLI program with emphasis on its national implementation