



# Caribbean Lifestyle Intervention

# CARLI





**Pan American  
Health  
Organization**



*Regional Office of the  
World Health Organization*

Published by the Caribbean Program Coordination (CPC)  
Office of the Caribbean Program Coordination (CPC)  
Pan American Health Organization and the World Health Organization (PAHO/WHO)  
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*The world is living dangerously - either because it has little choice or because it is making the wrong choices about consumption and activity.*

— Gro Harlem Brundtland 2002

## Introduction

Noncommunicable diseases (NCDs) are the leading causes of death and disability worldwide. The World Health Report 2000 estimates that these disorders together contributed to almost 60% of mortality worldwide (31.7 million deaths), and 43% of the global burden of disease in 1999. If current trends continue these diseases are expected to account for 73% of deaths and 60% of the disease burden in the year 2020.<sup>1</sup>

NCDs affect individuals during their productive years. 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. NCDs therefore have a significant economic cost and negative impact on development.

The most prevalent NCDs in the Region of the Americas, which include cardiovascular disease, hypertension, diabetes and cancer, share common risk factors. These include obesity, physical inactivity, tobacco and alcohol use and unhealthy nutrition, - factors that are related to lifestyle, are potentially preventable and can be addressed in an integrated manner.

These risk factors present interactive, additive and synergistic effects. Efforts to reduce the impact of the major NCDs should focus on preventing and controlling the risk factors in an integrated manner. By addressing one risk factor, it is possible to help prevent and control other NCDs simultaneously.

Many of these risk factors are well understood scientifically. Estimates of their risk probabilities and consequences are available. This has facilitated the development of effective strategies for the prevention and management of NCDs and their risk factors. One of the best known intervention programmes is in North Karelia, Finland which has had considerable success in reducing mortality due to NCDs as well as achieving a decline in smoking rates, serum cholesterol and blood pressure levels, and healthy dietary changes.

## NCDs in the Caribbean

There is abundant evidence that non-communicable diseases (NCDs) contribute significantly to death and illness in the Caribbean. A review of recent literature including "Health in the Americas (2002 edition)" reveals a picture that is alarming and which makes a convincing case for urgent effective action to be taken.

A few examples will highlight the prevalence of the risk factors and the burden of the chronic non-communicable diseases affecting the Caribbean in terms of morbidity, disability, mortality and socio-economics.

- The English-speaking Caribbean has the highest mortality from diabetes in all the sub-regions of the Americas. It is estimated that, in the next decade, diabetes prevalence will increase by 74% of current levels in the Caribbean.
- The total indirect cost of diabetes in the English speaking Caribbean in 2000 was estimated to be 812.4 million US dollars.<sup>2</sup>
- In almost every country of the region, diseases of the circulatory system were the leading group causes of mortality - ranging from 28% to 54.7% of all mortality during the period 1996-1999.
- In Saint Kitts and Nevis, a Diabetes and Cardiovascular Needs Assessment Survey conducted in 2000 among 353 workers (average age 35 years) showed that 8% were diabetic, two-thirds had abnormal lipid levels and two-thirds were overweight.
- In Jamaica, a population-based study conducted in 1996, showed that the prevalence of diabetes in the population aged 25-74 years was 13% and that the prevalence of obesity was 16%.
- That same study also found that the high prevalence of cardiovascular disease was associated with lower education levels. The employment rate among both men and women was significantly lower among those with a non-communicable disease, especially diabetes.
- In Belize, 5 out of 6 amputations were due to diabetes and 9% of cases of blindness were related to diabetic retinopathy.
- Prevalence of obesity among the Barbadian population has increased, mainly due to the adoption of high-fat diets and sedentary lifestyles. Data shows that 56% of women and 29% of men are overweight and 30% of Barbadian women are obese. It is estimated that by the age of 40 years, 40% of Barbadians have high blood pressure and 18% have diabetes.
- In Guyana, the Physical Activity Survey conducted among adults aged 20-59 showed that 28% were overweight and 23% were obese. The proportion increased with age- 33% in 20-29 and 68% in the group 50-59. In all age groups females had higher levels of overweight/obesity than males.
- Data from a behavioral risk survey reported in 1999 in Jamaica found that 36% of males and 11% of females ever smoked, 59% of males and females did regular exercise and 3.9% of males and 16% of females reported that they were obese.

<sup>1</sup> World Health Organization. Facts about NCD. [http:// who.int/hpr/ncd/facts.shtml](http://who.int/hpr/ncd/facts.shtml) (31 March 2003).

<sup>2</sup> The cost of diabetes in Latin America and the Caribbean; Bulletin of the World Health Organization

- Obesity is a growing problem in children. In the 0-5 year population the incidence of obesity is 2.5% in Saint Lucia; 3.9% in Barbados; 3.0% in Trinidad and Tobago and 6.0% in Jamaica.
- Data from the Global Youth Tobacco Surveys conducted in 12 countries of the Caribbean indicate that the prevalence of current smoking among 13-15 year old students ranged from 5.2%- 16.3%.

Initiatives and interventions to address NCD prevention and control have been implemented in the Caribbean for many years, but present approaches at country level have not impacted significantly on the problem which is evidenced by rising incidence and prevalence. The NCDs have not always been addressed in a systematic manner. Of the 15 English- and Dutch-speaking countries which took part in the World Health Organization's 2001 Assessment of National Capacity for NCD Prevention and Control, only one (1) country had a NCD Policy and three (3) had a NCD Plan.

There is now a sense of urgency to prevent the inexorable but not inevitable increase in incidence, prevalence, morbidity and mortality. The cost of preventing and treating NCDs may be high, but the cost of neglecting them will be vastly higher. Early effective action can prevent the emergence of diseases or can reduce existing levels.

It is for these reasons, that the Caribbean Lifestyle Intervention (CARLI) proposal was drafted and later endorsed by the September 2001 Caucus of CARICOM Ministers Responsible for Health. The Caribbean Lifestyle Intervention (CARLI) is an initiative for addressing integrated non-communicable disease prevention in the Caribbean. It is based on similar initiatives- CINDI (Countrywide Integrated Noncommunicable Diseases Intervention) in Europe and CARMEN<sup>3</sup> in the Americas.

### What is CARMEN?

CARMEN is an initiative of the Region of the Americas to reduce the risk of NCDs. CARMEN is also a network which forges partnerships among groups working or interested in working on NCD prevention or in developing their own network. The main objective is to set up, develop, integrate and further the agenda for integrated NCD prevention in the Americas. It seeks to:

- Promote and support cost-effective interventions for NCD prevention;
- Develop adequate strategies and methodologies for NCD prevention, considering the countries unique characteristics;
- Develop strategies to obtain the support of legislation and other key players;

- Promote and support community participation in NCD prevention initiatives; and
- Promote a regional agenda for tackling the NCD epidemic.

### What are the links between CARMEN and CARLI?

The CARMEN Initiative has two components:

- Risk Reduction
- Network development.

CARLI is envisaged as an Initiative which addresses the first component of CARMEN. It aims at reducing the impact of NCDs in the Caribbean through the development and implementation of integrated NCD Programmes peculiar and particular to the Caribbean region.

At present the Caribbean does not have the human, financial or technical resources to develop a network similar in scope to the CARMEN Network. Countries will therefore be encouraged to join the CARMEN Network to take advantage of the benefits the Network affords.

### What is CARLI?

The Initiative aims at improving the health status of the population in the Caribbean by focusing on the reduction of risk factors associated with non-communicable diseases, promoting healthy life and ultimately an improved quality of life. This is achieved through the development, implementation and evaluation of policies, social mobilization and community-based interventions, epidemiological surveillance of NCD risk conditions, and preventive health care services. The Initiative allows the Caribbean as a region to collectively address this major health problem. It also facilitates countries to develop and implement strategies to prevent and control NCDs and integrate them into their policies, plans and structures.

CARLI addresses the major risk factors associated with non-communicable diseases. However the specific factor or factors addressed at the country level should be based upon a situational analysis and the country's priorities.

CARLI complements other regional initiatives such as Healthy Settings, Primary Health Care (PHC), Caribbean Cooperation in Health (CCH), Health Promotion (HP), Health and Family Life Education (H&FLE), Workers health and Health Sector Reform (HSR).

The main risk factors to be addressed are:

- Unhealthy (poor) nutrition practices
- Physical inactivity
- Smoking
- Excessive alcohol consumption

<sup>3</sup> Conjunto de Acciones para la Reducción Multifactorial de las Enfermedades No transmisibles - a Spanish acronym meaning an Initiative for Integrated Noncommunicable Disease Prevention in the Americas.

These risk factors are all amenable to prevention measures and there are numerous examples of successful interventions to address these risk factors.

### What is different about CARLI?

CARLI seeks to bring together the resources of the region to address serious health problems that are being caused by NCDs and more specifically to focus on the prevention or reduction of the risk factors as distinct from the predominant biomedical response that is used at present. It therefore aims at tackling the problem from a different perspective. For those persons who already suffer from NCDs, it provides encouragement to focus on living healthier lives and reducing the risks of complications.

CARLI emphasizes health promotion and the community-based approach to prevention and treatment where people take responsibility for their own health. But it also stresses the importance of policies which provide an enabling and supportive environment and the need for the reorientation of health services to more effectively address risk reduction. The focus on risk reduction will impact favourably on the incidence of other NCDs since many of them share common risk factors—more bang for the dollar!

CARLI aims to foster collaboration and cooperation among NCD stakeholders at national and regional levels. It seeks to develop coordinated, organized and systematic approaches to NCD prevention and control. It builds on existing experiences and capitalizes on success stories in the region and worldwide.

### What are the benefits of CARLI?

- The implementation of the Caribbean Lifestyle Intervention at the national and regional levels can: Create the necessary focus for risk reduction programmes
- Build national capacity for research, monitoring and evaluation
- Strengthen partnerships, coalition formation
- Develop strategies for strengthening advocacy
- Make use of tools for action already developed
- Improve communication and networking through sharing of information and experiences
- Facilitate operationalizing at least some of the programme elements of NCD prevention and control programmes in the Caribbean
- Facilitate evaluation of the NCD programmes in the Caribbean
- Facilitate development of NCD Surveillance systems

- Provide opportunities for reaching the target populations earlier through risk-reduction and screening programmes
- Facilitate training of relevant personnel

### What are the main strategies of CARLI?

The CARLI initiative has incorporated the strategies of CARMEN: Integrated Prevention and Health Promotion, Demonstrative Effect and Promotion of Health Equity.

#### ▶ Integrated Prevention and Health Promotion

This entails developing interventions aimed at simultaneously preventing and reducing a set of risk conditions common to major NCDs.

#### ▶ Demonstrative Effect

Interventions are first introduced in a demonstration area so that the effectiveness can be evaluated in a given context.

#### ▶ Promotion of Health Equity

Strategies should aim at reducing overall population risk while reducing the gaps (socio-economic, health, education) among different population groups.

### What are the main lines of Action?

The lines of action of CARLI are the same as those of CARMEN. They are rooted in the following concurrent lines of action:

#### ▶ Development and implementation of policies for NCD prevention

Successful NCD prevention programmes have adopted a variety of policies, laws and regulations. Each country's policy building and implementation processes are unique. The process of policy formulation requires the support of a diversity of stakeholders.

#### ▶ Community-based interventions

This approach provides the opportunity for action at both community and individual levels and seeks to effectively involve families and communities, pooling and sharing resources to ensure integrated prevention interventions. The health sector becomes a partner rather than the head of the intervention. The active participation of communities and individuals, using available resources and mobilizing additional resources as needed is a major predictor of success.

#### ▶ Increase of NCD prevention actions in the health services

Health care services need to shift their focus from episodic care to a more proactive approach that considers participation in prevention programs and the needs of persons with chronic conditions. Health promotion, prevention and care should be

seen as a continuum, which is indivisible if effectiveness is expected.

### What therefore are some of the actions to be taken at country level?

In order to address risk reduction of NCDs effectively, countries will need to take several actions. These include:

- Development of policy to address NCD risk factors
- Where necessary, the drafting of legislation as a means of providing a supportive environment
- Strengthening the management of NCDs including establishment of a mechanism at the national level to address NCD Prevention and Control and the identification of a NCD Focal point
- Establishment/strengthening of information systems which will allow for the systematic collection and availability of timely, relevant data
- Conduct of studies to determine the economic impact of NCDs
- Identification of priorities and determining priority interventions
- Implementation of programmes and projects to address risk reduction
- Development of systems for monitoring and evaluation
- Dissemination of information, education and communication material
- Orientation of health services to address risk reduction and promotion of healthy lifestyles
- Fostering of an expanded response which will include linkages with all relevant sectors including NGOs and the private sector
- Documentation of the process at all levels

### What are the facilitating factors?

There are several factors which can facilitate the implementation of the Initiative. Among these are:

- Support of Caribbean Heads of Government who in their Nassau Declaration 2002 listed NCDs as a priority
- Increasing awareness among policymakers of the burden of NCDs
- History of working together as a region
- Support from CARICOM and PAHO and other technical cooperation agencies involved in NCD prevention

- Existence of institutions which could be possible partners
- Ongoing programmes and initiatives at the international, regional and national levels
- Existing frameworks and guidelines - CCH II, Health Promotion Charter; Strategic Plan for Prevention and Control of NCDs, Clinical and Nutritional Management guidelines, Cervical Cancer Prevention and Control Strategic Plan
- Access to CARMEN/CINDI Networks
- Health sector reform initiatives which are forcing countries to look at issues of costs and efficiency
- Interest of regional institutions including academic institutions
- Vibrant Non-Governmental Organizations - health and non-health related
- Establishment of the Caribbean Commission on Health and Development which seeks to place health at the centre of the development agenda.

### What are the possible threats?

There are also several factors which can impact negatively on the risk reduction programmes. Among these are:

- Low appreciation of the impact of NCDs on the health of the population and the need to address prevention issues
- Inadequate data about the economic costs of the NCDs
- Limited human and financial resources
- Inadequate infrastructure within some Ministries
- Lack of recent epidemiological data
- Lack of behavioural surveillance systems to better focus risk reduction activities
- Health services not adequately oriented to NCD prevention
- Lack of commitment of some stakeholders
- Lack of awareness among the population about the roles they can play in NCD prevention

### What are the key CARLI messages?

It is necessary to ensure that the public is well informed. It is therefore important to communicate information about the risk factors and interventions clearly and openly to the public and also creating an atmosphere of trust and shared responsibility between the government, the public at large and the media. Aggressive marketing techniques will need to be utilized to counteract some of the messages in the media which do not contribute to healthy lifestyles.

The issues may be positioned in several ways such as:

- NCDs is a problem that is not only related to the middle aged and old.
- More and more young persons are getting NCDs.
- NCDs have a serious socio-economic impact.
- Something can be done about NCDs.
- Participating in physical activity and healthy eating contributes to health and wellness and can allow the person to look good and feel good.
- There is a body of evidence at international, regional and country level to attest to the value of risk reduction.

### How can the Initiative be sustained?

Any interventions or actions to decrease the burden of NCDs must be sustained to ensure effectiveness. Some of the measure to achieve sustainability are:

- Situating NCDs on the political agenda of the countries as was done with HIV/AIDS
- Regular reporting to COHSOD and meetings of Ministers Responsible for Health and, through them, to the Caribbean Heads of Government
- Keeping influential persons such as Permanent Secretaries informed of the benefits/successes of the Initiative
- Building partnerships with Government Ministries and agencies, civil society, the media and community groups such as Patient Support Groups
- The establishment of the CARLI School in the Caribbean which will help in training NCD Focal Points and other relevant persons in aspects of NCD prevention and control.
- Making the risk reduction initiative an agenda item on regular meetings of relevant officers such as Chief Medical Officers, Food and Nutrition Councils
- Convening regular meetings of NCD Task Force and NCD Focal Points to assess and support implementation
- Enlisting support from private sector and other groups in the society
- Actively encouraging the support of NGOs, private sector and other groups which can play important roles in this area.

Technical support for the Initiative will be available from the Pan American Health Organization through its centres and country representatives, the Office of Caribbean Program Coordination and Headquarters.

Some of the specific cooperation activities would be to support:

- Development and implementation of national projects
- Dissemination of information on NCD risk reduction
- Marketing of the initiative
- Strengthening of the NCD Focal Points
- Mobilization of resources
- Conduct of relevant research
- Establishment of networks and coalitions to address NCD risk reduction
- Facilitate partnerships among stakeholders
- Development/design of projects and policies
- Skills development

The Office of Caribbean Program Coordination would have specific responsibility to:

- Serve as a clearing house for information on NCD risk reduction
- Disseminate information
- Market the initiative at the regional level
- Facilitate technical cooperation among countries
- Mobilize resources for regional projects/activities
- Network with other sub-regional partners and agencies
- Support multi-centre research
- Spearhead common interventions

The PAHO Centres in the Caribbean- CFNI and CAREC- will provide technical support in their areas of expertise. CAREC will support the strengthening of the epidemiological data including conduct of Behavioral Risk Factor Surveys. CFNI will take the lead in providing technical assistance in the area of food and nutrition.

CARICOM will be responsible for providing technical support, assisting with the mobilization of resources as well as keeping NCDs and risk reduction on the political agenda.

### Conclusion

The Chronic Non-Communicable Diseases are major causes of morbidity, disability and mortality. They negatively affect the quality of life of the persons who suffer from them. There are strategies/interventions which can delay or prevent the onset of these diseases and which can reduce the risk of complications. What is required is concerted, sustained, collaborative action. The result of reducing risks and promoting healthy life will have a wide and lasting social and economic value, even beyond preventing premature death and disability, for each country.

- **We cannot afford to be complacent. We must act NOW!**



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