GLOBAL HEART

VOL. 7, NO. 1, 2012

ISSN 2211-8160/$36.00

DOI: 10.1016/j.gheart.2012.02.002

gVOICES

REVIEW

NCD Prevention and Control in Latin America and the Caribbean

A Regional Approach to Policy and Program Development

C. James Hospedales [†], Alberto Barcelo [‡], Silvana Luciani [§], Branka Legetic [¶], Pedro Ordunez [‖], Adriana Blanco [♥]

Washington, DC, USA

Abstract

This article describes efforts from the Pan American Health Organization (PAHO) that have supported progress in country-driven planning and implementing of actions to address noncommunicable diseases (NCD), as well as mechanisms that PAHO has supported for countries in the Americas to share and build on each other's experiences. The Regional Strategy and Plan of Action for NCD, approved by all member states in 2006, is the major frame for this work. The strategy has 4 lines of action: policy and advocacy; surveillance; health promotion and disease prevention; and integrated management of NCD and risk factors. Cross-cutting strategies include resource mobilization, communication, training, and networks and partnerships. The strategy is operationalized through biannual work plans for which countries link and commit to achieving specific objectives. PAHO then provides technical support toward achieving these plans, and countries report progress annually. The CARMEN (Collaborative Action for Risk Factor Prevention and Effective Management of NCD [Conjunto de Acciones para la Reducción y el Manejo de las Enfermedades No transmisibles]) Network provides a major platform for sharing, and the multisector Pan American Forum for Action on NCD has been launched to extend the network to include business and civil society. PAHO also supported civil society capacity building. Almost all member states have made substantial progress in implementing their national chronic disease programs, in most instances reporting exceeding the indicators of the strategic plan related to chronic diseases. From the Caribbean countries, leadership has been provided to achieve the historic UN High-Level Meeting on NCD in September 2011. The region is on track to meet the mortality reduction target set for 2013, though much remains to be done to further increase awareness of and resources for scaling up NCD prevention and control programs, given the huge health and economic burden, increasing costs, and worrying increases of some conditions such as obesity. Major challenges include getting NCD into social protection packages, building the human resource capacity, strengthening surveillance, achieving true intersectoral and multipartner action, given that most determinants of the epidemic lie outside the health sector, and increasing investment in prevention.

From the [†]Prevention and Control of Chronic Diseases, Pan American Health Organization, Washington, DC, USA; [‡]Disease Management, Chronic Disease Prevention and Control, Pan American Health Organization, Washington, DC, USA; [§]Cancer, Chronic Disease Prevention and Control, Pan American Health Organization, Washington, DC, USA; [¶]Surveillance, Chronic Disease Prevention and Control, Pan American Health Organization, Washington, DC, USA; [‖]Disease Management and Cardiovascular Disease, Chronic Disease Prevention and Control, Pan American Health Organization, Washington, DC, USA; and [♥]Tobacco Control, Pan American Health Organization, Washington, DC, USA. Correspondence: C.J. Hospedales (hospedaj@paho.org).

GLOBAL HEART, VOL. 7, NO. 1, 2012
March 2012: 73–81

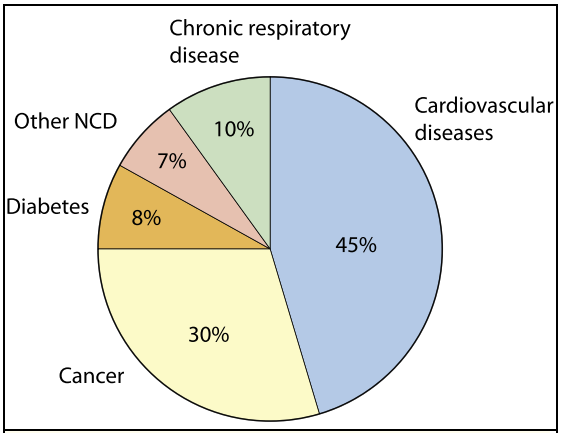

Figure 1. Summary of NCD situation in the Americas. (1) The total NCD deaths for 2007 was 3.9 million. (2) Thirty-six percent of deaths were people younger than 70 years of age. (3) One forty-nine million smokers; 30–40% of people 25–64 years of age are hypertensive; and 25% of people older than 15 years of age are obese. (4) Approximately 250 million people live with NCD in the Americas.

Against a background of rising concern regionally and globally about noncommunicable diseases (NCD), in 2006 the Directing Council of the Pan American Health Organization (PAHO) approved a comprehensive regional strategy for the prevention and control of chronic NCD [1]. The resolution urges member states to implement integrated policies and plans, guided by the regional strategy, and requests the director of PAHO to strengthen country capacity to implement comprehensive, multisector approaches, and to strengthen or establish new partnerships as necessary. This strategy has 4 main lines of action—policy and advocacy, surveillance, health promotion and disease prevention, and improving integrated management of chronic diseases and risk factors—and is coherent with the World Health Organization (WHO) global plan for prevention and control of NCD.

The process of preparing the regional strategy and plan of action included intensive consultation with the 35 countries of the region, academic institutions, and the CARMEN (Collaborative Action for Risk Factor Prevention and Effective Management of NCD [Conjunto de Acciones para la Reducción y el Manejo de las Enfermedades No transmisibles]) Network, which was founded in 1997 for the integrated prevention and control of chronic diseases in the Americas, to ensure ownership by countries. The strategy included a range of policy and process objectives and indicators, typically, "number of countries which have achieved X by year." A small team in the regional office in Washington, DC, and NCD focal points in 31 PAHO country offices operationalized the strategy through the PAHO 5-year Strategic Plan, 2008–2012 [2], and through biannual and 6-month work plans negotiated with countries, ensuring further country ownership. The PAHO 5-year plan has a goal for reducing NCD, which we are on track to achieve, and a subset of indicators from the NCD regional strategy. (Specifically, the goal is reduction of the estimated annual number of deaths related to major NCD [cardiovascular diseases, cancer, chronic respiratory diseases, and diabetes] in Latin America and the Caribbean. Baseline: 2.4 million deaths in 2000. Target: 2.1 million deaths by 2013.) During the biannual planning discussions, countries link in the planning system to particular indicators and commit to achieving them. Through the PAHO's results-based management processes, ministries of health report annually on achievement through the PAHO country offices. These reports are then collated and reported biannually to WHO.

SUMMARY OF SITUATION AND RESPONSE

Chronic NCD are the leading cause of death in the Americas, with some 3.9 million deaths per year, as summarized in Figure 1. In 2005, some 250 million people were estimated to be living with an NCD, mainly cardiovascular disease, cancer, chronic respiratory disease, obesity, and diabetes. These increasingly affect low- and middle-income populations. Smoking and hypertension are highly prevalent. An estimated 139 million (25%) of persons >15 years of age were obese (body mass index >30) in 2005, of which 103 million were women. By 2015, this number is expected to increase to reach an estimated 289 million (39%), of which 164 million will be women. There is also widespread and increasing concern over the increase of childhood obesity.

Since the resolution on NCD in 2006, almost all member states have made substantial progress in implementing national chronic disease programs, as noted Table 1. In most cases, countries reported exceeding the Regional Expected Result indicators of the Strategic Plan related to NCD.

To aid implementation, during the 2008/2009 biennium, PAHO mobilized from internal and external sources approximately US$21 million of the $28 million budgeted to support Strategic Objective 3. (Strategic Objective 3: To prevent and reduce disease, disability, and premature death

from chronic noncommunicable conditions, mental disorders, violence, and injuries.) This is an ongoing challenge given the scarcity of resources for NCD at the international level [3]. Nevertheless, some partners have provided important technical and financial collaboration, notably, the Spanish International Cooperation Development Agency, the US Centers for Disease Control and Prevention), the Public Health Agency of Canada, the World Diabetes Foundation, Bloomberg Philanthropies, and the Robert Wood Johnson Foundation.

POLICY AND ADVOCACY

In 2010, a WHO NCD national capacity survey in the region showed countries in Latin America and the Caribbean reporting making program-related

Table 1. Selected regionwide indicators, status and list of countries and territories: reporting progress in NCD prevention and control

Regional indicator No.	Indicator "Number of Countries . . ."	Number at end of 2011	Countries and territories reporting progress
3.1.3	Health ministries have a unit or department for NCD with its own budget	31	BAH, GUY, HAI, JAM, SUR, TRT, BOL,COL, ECU, PER, VEN, BRA, CHI, PAR, URU, COR, GUT, MEX, NIC, PAN, CUB, BAR, SAL, CAN, ARG, ANI, ABM, BLZ, SAV, SCN, USA
3.2.4	Implementing a national policy and plan for the prevention and control of NCD	14	CAN, USA, MEX, GUT, BOL, VEN, ARG, BRA, CHI, PAR, BAR, JAM, SAL, ABM
3.3.4	With a national health reporting system and annual reports that include indicators of NCD and risk factors	16	CAN, USA, MEX, GUT, NIC,VEN, ARG, BRA, CHI, PAR, URU, BAR, DOM, JAM, SCN, TRT
3.6.1	Implementing integrated primary healthcare strategies recommended by WHO in the management of NCD	24	BRA, CHI, COR, CUB, GUT, HON, NIC, MEX, TRT, USA, CAN, PER, BAH, BLZ, GRA, JAM, BAR, PAR, SAL, PAN, SUR, GUY, FEP
6.3.1	With smoke-free legislation including all public places and workplaces (public and private), consistent with the WHO FCTC[a]	14	URU, PAN, GUT, CAN, COL, HON, PER, TRT, VEN, ARG, BAR ECU, ELS, BRA
6.3.2	With bans on advertisement, promotion, and sponsorship of tobacco products consistent with the WHO FCTC	7	PAN, COL, URU, ECU, ARG, BRA, ELS
6.3.3	With regulations on packaging and labeling of tobacco products consistent with the FCTC	19	BRA, CAN, COL, CHI, URU, CUB, JAM MEX, PAN, VEN, ARG, ECU, ELS, HON, NIC, PER, TRT, BOL, USA
6.4.1	That have implemented policies, plans, or programs for preventing public health problems caused by alcohol, drugs, and other psychoactive substance use	16	BLZ, BRA, COR, CAN, DOR, FEP, HON, NIC, PAN, PER, USA, URU, BOL, CHI, ELS, GUT, VEN
9.4.3	Number of countries that have developed national programs that implement strategies for promotion of healthy dietary practices in order to prevent diet-related chronic diseases	19	COR, PAN, ELS, NIC, BAH, JAM, GUT, PER, CHI, COL, BRA, ARG, BLZ, HON, URU, VEN, ABM, ANI, DOM, FEP, BOL, DOR, ECU
12.3.2	Number of countries with a national list of essential medical products and technologies updated within the last 5 years and used for public procurement and/or reimbursement	27	BAH, BAR, BLZ, BOL, BRA, COR, CUB, DOR, ECU, ELS, GRA, GUY, MEX, NIC, PAR, PER, SAL, SUR, URU, CHI, COL, HON, PAN, TRT, ARG, HAI, SAV

There are 35 countries in the region, and 40 reporting entities in the PAHO system, including Puerto Rico; UK, Dutch, and French Territories; and the US–Mexico border. Reprinted, with permission, from PAHO [2], October 2007 version.

[a] For further information please see Information Document CE146/INF/6-E.ABM, United Kingdom Overseas Territories (Anguilla, British Virgin Islands, Montserrat); ANI, Antigua and Barbuda; ARG, Argentina; BAH, Bahamas; BAR, Barbados; BLZ, Belize; BOL, Bolivia; BRA, Brazil; CAN, Canada; CHI, Chile; COL, Colombia; COR, Costa Rica; CUB, Cuba; DOM, Dominica; DOR, Dominican Republic; ECU, Ecuador; ELS, El Salvador; FCTC, Framework Convention on Tobacco Control; FDA, French Departments in the Americas (French Guiana, Guadeloupe, Martinique); FEP, El Paso Office/US–Mexico Border; GRE, Grenada; GUT, Guatemala; GUY, Guyana; HAI, Haiti; HON, Honduras; JAM, Jamaica; MEX, Mexico; NCA, Bermuda, Cayman Islands; NCD, noncommunicable disease; NEA, Netherlands Antilles; NIC, Nicaragua; PAHO, Pan American Health Organization; PAN, Panama; PAR, Paraguay; PER, Peru; PUR, Puerto Rico; SAL, St. Lucia; SCN, St. Kitts and Nevis; SAV, St. Vincent and the Grenadines; SUR, Suriname; TCA, Turks and Caicos Islands; TRT, Trinidad and Tobago; URU, Uruguay; USA, United States; VEN, Venezuela; WHO, World Health Organization.

GLOBAL HEART, VOL. 7, NO. 1, 2012
March 2012: 73–81

investments in NCD, including having a national focal point in the ministry of health, training personnel, and creating multisectoral partnerships. Compared with 2005, when 63% of countries had a national focal point/unit and budget, nearly all countries now report having such. However, more efforts are needed because only 14 countries have an operational national plan for NCD. Many countries have also taken important steps to include NCD, including medicines, in social protection packages.

The CARMEN Policy Observatory is a joint initiative between PAHO and the PAHO/WHO Collaborating Center on NCD Policy at the Public Health Agency of Canada, engaged in the systematic analysis and monitoring of chronic disease policies. The observatory developed the instrument for the WHO NCD national capacity survey, which was available not only for WHO study purposes in 2010, but also on PAHO's Website [4] for use by countries.

In 2009 and 2010, PAHO prepared a compilation of the Latin American and English-speaking Caribbean countries' legislation on prevention and control of obesity, diabetes, and cardiovascular diseases [5,6], as well as drafted guidelines to help in the up-grading of legislation when needed. The next planned steps include conducting deeper analyses, studying lessons learned, preparing model legislative briefs for the Caribbean, and engaging the Latin American Parliamentary organization, Parlatino [7]. This will be important to support the development of the multisectoral policies needed to address NCD.

In coordination with WHO, in 2008, 2009, and 2010, tobacco control laws and regulations were compiled and analyzed for 5 measures: protection from second-hand smoke; packaging and labeling; advertising, promotion, and sponsorship; tobacco taxes and prices; and cessation services. Data on these measures for the 35 member states in the Americas were published in the PAHO Tobacco Control Regional Report, editions 2010 and 2011 [8–10].

The economic, fiscal, and welfare implications of NCD and aging were analyzed in a regional workshop held in 2009 with 10 countries and representatives from the Inter-American Development Bank and the World Bank. A follow-up meeting was held in November 2011 in Mexico with the participation of policy makers from ministries of health and finance. This established a core group of agencies and countries to lead research work on the economic aspects in order to improve priority setting for NCD in Latin America and the Caribbean.

A focus of PAHO's NCD advocacy work is the political integration mechanisms in the Caribbean, Central America, and the Andean and the Southern cone regions of South America. The highlight was the historic heads of government summit of the Caribbean community in 2007, which led to the UN convening a High-Level Meeting (UNHLM) on NCD in September 2011. Follow-up assessments have shown advances in surveillance and advocacy efforts and massive support for the Caribbean Wellness Day, but still much work is needed to fully operationalize NCD plans and intersectoral commissions, as well as strengthen the response of the healthcare sector [11]. In Central America, RESSCAD/COMISCA (Reunión del Sector Salud de Centroamérica y República Dominicana/Consejo de Ministros de Salud de Centroamérica [Meeting of the Health Sector of Central America and the Dominican Republic/Council of Ministers of Health of Central America]) adopted resolutions on chronic disease and cancer and developed annual plans on NCD. MERCOSUR (Mercado Comun del Sur [Southern Commom Market]) produced a report assessing the situation related to NCDs with recommendations for policy actions [12]. In 2011, MERCOSUR ministries formed an intergovernmental commission for NCD prevention and control to work on joint solutions to improve policy processes and the situation regarding risk factors and NCD [13]. The Andean Regional Health Organization, Organismo Regional Andina de Salud, also passed a resolution on cardiovascular disease and NCD. Because many public policies are collectively made in these integration fora, they represent an important point of continued engagement by PAHO for intersectoral policy change.

The Caribbean Wellness Day served as a stimulus for an inaugural Wellness Week in September 2011 that was jointly initiated by PAHO and the World Economic Forum. In New York and 22 other cities in 11 countries, activities to promote physical activity, healthy diet, family interaction, and health screening were conducted. This aligned the directions of the UNHLM with intersectoral dialogue and actions in cities, creating partners with the local governments, the health sectors, private industries, academia, and others. This partnership for action has an impact not just in the organization of specific events for the Wellness Week, but it also supports

the development of urban policies and social mobilization to reduce NCD.

PAHO also helped to strengthen civil society capacity to advocate for NCD prevention and control. In 2008, support was provided to catalyze the formation of the Healthy Caribbean Coalition, a 35-member nongovernmental organization (NGO) alliance dedicated to combating NCD, which in 2011 conducted an unique GetTheMessage text campaign across 17 countries to support the UNHLM (see [14]). In 2011, support was also provided to catalyze the formation of a healthy Latin American coalition, which rapidly grew from 40 to over 100 NGOs advocates for NCD and the UNHLM (see [15]). The participation of civil society in issues such as food marketing to children and child obesity has increased significantly over the past 5 years, notably in Brazil, Canada, Chile, Mexico, and the United States.

SURVEILLANCE

PAHO/WHO supports countries to strengthen health information systems to monitor NCD by providing guidance, tools, and training for implementing the PanAm STEPS methodology. This focuses on adult risk factor surveillance as part of a WHO-wide effort to help countries build and strengthen capacity. It uses population-based samples and contains questionnaire, anthropometry, and blood test components. It provides an entry point for low- and middle-income countries to get started on NCD surveillance. In addition, PAHO has worked with countries to develop a minimum list [16] for NCD surveillance, including mortality, morbidity, risk factors among adults and adolescents, use of preventive services, and NCD-related policies. Eighteen target countries have established a system to collect and analyze these data from the social determinants and gender perspectives. Discussion forums on NCD surveillance have been established through MERCOSUR, through the Caribbean epidemiologists' network coordinated by Caribbean Epidemiology Centre (CAREC), and for Andean counties with Andean Regional Health Organization. Twenty-seven target countries have produced at least 1 report on the situation of NCD or included it in the report of the health situation of the country.

As part of the preparation for UNHLM, PAHO also prepared for the first time a summary compilation of NCD indicators [16] from the Americas, by country and subregion. This stimulates intercountry discussions, comparisons, forms a baseline for the future, and helps countries to make a stronger case. PAHO also supports the Global School Health Survey as a standardized way of collecting behavioral risk-factor information among 13- to 15-year-old students. Since 2005, 22 counties in the region have performed those studies and have available data [17].

The Global Tobacco Surveillance System (GTSS) was created in 1998 by the WHO, the U.S. Centers for Disease Control and Prevention, and the Public Health Agency of Canada to support countries to monitor the tobacco epidemic, and it includes data from 4 surveys: 3 school-based—the Global Youth Tobacco Survey, the Global School Personnel Survey, the Global Health Professions Student Surveys; and 1 household-based—the Global Adult Tobacco Survey. The Global Tobacco Surveillance System has been running in the Americas for over 10 years, responding to article 20 of the WHO Framework Convention on Tobacco Control (FCTC). Currently all of the PAHO/WHO member states have implemented the Global Youth Tobacco Survey at least once (except Canada) and more than one-half have conducted it twice. The Global Adult Tobacco Survey is a national household survey that started in 2008 and 5 countries have completed it or are in the process of doing so. The Global Health Professions Student Surveys is a survey of students mainly from medicine, dentistry, nursing, and pharmacy. Health professionals play a critical role in reducing tobacco use providing brief and simple advice. In the Americas, 23 countries have collected data for health professional students, on topics such as tobacco use, knowledge, and attitudes. The synergy between countries passing tobacco control laws, regulations, or decrees; ratifying and complying with the WHO FCTC; and conducting Global Tobacco Surveillance System surveys offer an important opportunity to develop, implement, and evaluate comprehensive tobacco control polices.

HEALTH PROMOTION AND DISEASE PREVENTION

Healthy diet, the promotion of physical activity, and tobacco control continue to be the pillars of the regional strategy, though most programs lack the necessary human and financial resources. A

GLOBAL HEART, VOL. 7, NO. 1, 2012
March 2012: 73–81

Trans-Fat Free Americas Initiative was launched by PAHO in 2007 in collaboration with the private sector, which promotes regulations, guidelines, and voluntary actions to eliminate trans-fats from processed foods. Such an initiative has the potential to greatly reduce the population's risk for cardiovascular diseases.

A Dietary Salt Reduction Initiative to prevent cardiovascular disease in the Americas was launched by PAHO in 2009 with a consumption target of <5 g/person/day by 2020. An expert group was created and has outlined actions for governments, industry, and civil society, while preserving the benefits of salt fortification programs. Among the member states, only 3 (Argentina, Chile, Canada) had plans to implement salt-reduction policies before 2009. The expert group has gathered evidence and developed a rationale for the initiative, setting a policy goal for the region to obtain a gradual and sustained drop in dietary salt intake to reach the goal or national targets if stricter. The first output was a policy statement that serves as a roadmap for government, civil society, and the private sector as well as PAHO. The statement has been widely disseminated for endorsement throughout the region to policy makers, NGO leaders (representing consumers, and health, scientific, and healthcare professionals), the food industry (including food processors and distributors), and international organizations. As of May 2011, 62 organizations have endorsed and used the policy statement for further development. For the governments of Uruguay and Costa Rica, the statement endorsement has served as the foundation for launching their national initiatives. For civil society in Latin America, led by Consumers International and the InterAmerican Heart Foundation, it was a base for organizing civil society to promote and take action regarding the policy on salt reduction. The 2011 report of the Expert Group summarizes progress to date [18].

Seventy-six cities in 14 countries (Argentina, Brazil, Chile, Colombia, Costa Rica, El Salvador, Canada, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Peru, United States) across the Americas have established *ciclovias recreativas* (recreational bike paths). Nine countries (Brazil, Chile, Colombia, Canada, Ecuador, Guatemala, Mexico, Peru, United States) have developed programs on bus rapid transit, which reduce traffic congestion, reduce road-accidents, and facilitate utilitarian and recreational physical activities. The Caribbean countries have all implemented Caribbean Wellness Day, emphasizing mass physical activity.

Since the entry in force of the WHO FCTC in February 2005, a main area of work of the organization had been to provide technical support for member states to become parties to the convention and to implement and enforce its mandates. In some cases, rapid operational research was conducted and linked to a specific legislative process, e.g., implementation of a smoking ban requiring research on levels of exposure to secondhand smoke in public places or measuring the economic impact on bars and restaurants after the ban is passed. In this way, an extra "push" is given to support country efforts to implement policy.

PAHO's Directing Council approved 2 resolutions in this area in 2008 and 2010. By the end of 2011, 29 countries of 35 are parties to the WHO FCTC. Significant progress has been made in the incorporation of the WHO FCTC mandates into national legislation but still there is a long way to go. Currently, 13 countries have become totally smoke-free in indoor public places and workplaces and almost one-half of the countries in the region have graphic health warnings on the packages of tobacco products. The progress toward other provisions of the treaty—such as a total ban on advertisement, promotion, sponsorship, and raising tobacco taxes—has been slower.

PAHO also promotes the concept of urban health as a means to address the needs in situations of vulnerability, through urban planning that promotes safe spaces for physical activity and healthy eating habits, 2 important protective factors for the prevention of NCD. World Health Day 2010 stimulated all the countries of the region to promote activities related to physical activity and healthy lifestyles. PAHO's programs on healthy schools and on healthy workplaces include attention to healthy diet, physical activity, and other measures that support NCD prevention. A major objective of the WHO workers' health plan is healthy workplaces.

INTEGRATED MANAGEMENT OF CHRONIC DISEASES AND RISK FACTORS

PAHO promotes the organization of evidence-based, patient-centered care as established by the Chronic Care Model and works closely with member states, professional associations, and other partners supporting the development and implementation of evidence-based guidelines and protocols for the integrated management of NCD.

Currently, 18 countries are working with PAHO in the implementation of integrated primary healthcare strategies to improve quality of care for persons living with chronic diseases such as diabetes, hypertension, and cancer. In 2009, a rapid assessment in 24 countries [19] on the capacity of disease management showed the availability of guidelines or protocols for hypertension and diabetes in 23 countries (97%). Twenty countries (86%) had protocols for cancer, but a very low proportion had guidelines and protocols for weight control and physical activity. There were no policies for the access to some medications and services, particularly for low-income groups, though all countries had a list of essential medicines for NCD. The Central American region, through the support of Spanish International Cooperation Development Agency, has developed a list of essential medicines, mainly on cancer, for consolidated procurement.

NCD are associated with catastrophic family expenditure, which sharpens and deepens poverty. Access to treatment for low-income persons is hindered by 39% to 63% of the population having to pay full cost of basic medications for diabetes and hypertension. Between 25% and 75% of basic procedures/tests, including blood glucose monitor, X-rays, mammography, cervical cancer smears, colonoscopy, lipid profile, and dialysis, are not mentioned in guidelines to address NCD. However, they are available in about 85% of the countries of the region. Dialysis services are accessible in 83% of countries. It is estimated that around 40% of the population have to pay from their pocket an average of $99 per dialysis session, or $15,500 a year.

Among the NCD, cervical cancer continues to be a major public health problem in Latin America and the Caribbean, with an estimated 68,000 new cases and 31,000 deaths annually. With the ministries of health in the region, PAHO has been improving the effectiveness of cervical cancer programs, particularly in low-resource settings. Demonstration projects have been established in over 5 countries to generate evidence on the feasibility and effectiveness screening and pre-cancer treatment approaches in limited-resource settings. Technical assistance was also provided to over 10 countries in the region to strengthen existing cytology screening programs, and a subregional program for the Caribbean was established to improve the quality and access to screening programs. With the advent of human papillomavirus vaccines, PAHO has been supporting countries to introduce these vaccines as part of comprehensive cervical cancer prevention programs. With respect to cancer treatment, PAHO has a longstanding history of working with all member states to improve the quality of and access to radiotherapy services and to strengthen cancer treatment capacity.

STRENGTHENING NETWORKS AND PARTNERSHIPS

The CARMEN Network of national chronic disease program managers, WHO Collaborating Centers, and NGO has been strengthened and expanded to 32 countries. Regional courses have been conducted under the CARMEN school, in collaboration with academic and technical institutions in evidence-based public health practice, social marketing, physical activity, and chronic disease care. In 2009, PAHO established a multistakeholder Partners' Forum for Action on Chronic Diseases to serve as an instrument to engage the private sector and the civil society together with member states, given that no one sector can solve the problem alone. This mechanism aims to leverage unique roles and capacities of each sector to take joint action to accomplish policy and environmental change to promote health and prevent chronic disease. Early operationalization took place in 2010, and 5 initial thematic/regional working groups were established that focused on healthy workplace; access to health services; healthy diet/salt reduction; information, communication, and advocacy; and physical activity. Subsequently, Trinidad and Tobago launched a national forum in March 2010, and the US–Mexico Border Partners' Forum, Panama, and Central America is in the scoping/planning stages. Mexico established a multisectoral National Council on Chronic Diseases in February 2010, and Brazil launched a national multisector forum in August 2011. In September 2011, the director of PAHO announced the next phase of the Partners' Forum as the Pan American Forum for Action on NCD. This will enhance the capacity of the member states to implement the UNHLM declaration in respect of multisector action.

CONCLUSIONS AND NEXT STEPS

Although there has been progress over the period, many gaps remain. There is insufficient awareness among policy makers, especially of the

GLOBAL HEART, VOL. 7, NO. 1, 2012
March 2012: 73–81

development, economic, and fiscal impacts. The public is not sufficiently well informed on basic prevention measures. Even though many cost-effective interventions exist, as exemplified in the WHO "Best Buys," investment in primary prevention remains low, and there is a lack of inclusion of NCD in most social protection packages, which arguably is a human rights issue. Coverage and quality of care remain inadequate in most countries. As recognized in the UNHLM, NCD are both a cause and effect of poverty. Major challenges include: the intersectoral nature of the problem; the increasing burden of obesity in adults and increasingly in children; continued urbanization with sedentary lifestyles; the continued nutrition transition with trade liberalization; and massive marketing of tobacco, alcohol, and food high in fat, sugar, and salt. The lack of trained human resources in countries to prevent and control NCD is also a major challenge. But there are cost-effective solutions, which can save millions of lives, avoid billions in economic damage, and increase productivity and development prospects. This will require an all-of-government and all-of-society approach.

Actions to be taken in countries in the next 5 years are well outlined in the Regional Strategy, and in the UNHLM Declaration. Countries need to put the issue on the development and economic agenda, increase investment in prevention, and include NCD and related essential medicines in social protection packages. PAHO and countries must continue working together to promote intersectoral policy change and an all-of-society response. This is now well appreciated by ministries of health; the challenge is how.

Member states and PAHO should also make a concerted effort to build competencies for comprehensive, integrated prevention and control of NCD, including multistakeholder engagement with a strengthened stewardship role of ministries of health. Member states should continue to scale up access to medicines and quality health services for screening (making full use of TRIPS flexibilities), early detection, and control of NCD, including patient self-care. A critical issue is to continue to invest in strengthening surveillance and vital registration systems to improve the quality and timeliness of information to guide planning and evaluation, especially risk-factor information, and using novel approaches and technologies (e.g., use of telephone/cell phone surveys). There are now a range of successful initiatives in the region, and technical cooperation between countries on successful practices and sharing of experiences should be actively pursued. PAHO should facilitate and support such sharing, including the CARMEN Network and electronic platforms. PAHO and member states should continue strengthening national and subregional intersectoral efforts, partnerships, and alliances as a key cross-cutting strategy, including engaging the private sector and civil society.

Finally, PAHO should strengthen efforts to support member states to review and strengthen their legislation and norms for addressing NCD and tobacco control, including implementation of WHO guidelines on marketing foods and nonalcoholic beverages to children as approved at the 63rd World Health Assembly [20].

REFERENCES

1. WHO. Regional strategy and plan of action for an integrated approach to the prevention and control of chronic diseases including diet physical activity and health. Available at: http://www.whqlibdoc.who.int/publications/2009/9789241597418_eng.pdf. Last accessed March 7, 2012.
2. PAHO. PAHO Strategic Plan 2008–12. Available at: http://new.paho.org/hq/index.php?option=com_content&task=view&id=1640&Itemid=1425&lang=en. Last accessed March 7, 2012.
3. Nugent R, Feigl AB. Where have all the donors gone? Scarce donor funding for non-communicable diseases working paper 228. Washington, DC: Center for Global Development; 2010. Available at: http://www.cgdev.org/content/publications/detail/1424546. Last accessed March 7, 2012.
4. PAHO. Country profile of capacity and response to NCDs. Available at: http://new.paho.org/hq/index.php?option=com_content&task=view&id=2446&Itemid=1992. Last accessed March 7, 2012.
5. Recopilacion de Normas sobre Prevencion y Control de Enfermedades Cronicas en America Latina: Obesidad, Diabetes y Enfermedades Cardiovasculares. Washington, DC; 2009.
6. Compilation of legislation for the English-speaking caribbean countries and territories on prevention and control of obesity, diabetes and cardiovascular diseases. Available at: Accessed January 17, 2012.
7. Parlamento Latinoamericano. Home page. Available at: http://www.parlatino.org. Last accessed March 7, 2012.
8. CD 48 R2 WHO Framework Convention on Tobacco Control: opportunities and challenges for its implementation in the Americas. Washington, DC: PAHO; 2010. Available at: http://new.paho.org/hq/dmdocuments/2010/PAHO_Regional_Eng_v12%20(FINAL).pdf. Last accessed March 7, 2012.
9. CD 50 R6 strengthening the capacity of member states to implement the provisions and guidelines of the WHO Framework Convention on Tobacco Control. Washington, DC:

PAHO; 2010. Available at: http://new.paho.org/hq/dmdocuments/2010/PAHO_Regional_Eng_v12%20(FINAL).pdf. Last accessed March 7, 2012.
10. PAHO. PAHO Tobacco Control reports: the 2011 tobacco control report for the region of the Americas. Available at: http://new.paho.org/hq/index.php?option=com_content&task=view&id=4457&Itemid= 1231&lang=en. Last accessed March 7, 2012.
11. Hospedales CJ, Samuels TA, Cummings R, et al. Raising the priority of chronic noncommunicable diseases in the Caribbean. Rev Panam Salud Publica 2011;30:393–400.
12. PAHO. Primer Reporte de Vigilancia de Enfermadades No Transmisibles (ENT): Situacion Epidemiologica de Argentina, Brasil, Chile, Paraguay y Uruguay; 2011. Available at: http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=2324&Itemid=2322&lang=en. Accessed January 27, 2012.
13. Ministerio de Salud Pública y Biuenestar Social. XX Reunión de Ministros del MERCOSUR Presentan situación regional de enfermedades transmisibles y no transmisibles. Available at: http://www.mspbs.gov.py/v2/8234-XX-REUNION-DE-MINISTROS-DEL-MERCOSUR-Presentan-situacion-regional-de-enfermedades-transmisibles-y-no-transmisibles. Accessed January 17, 2012.
14. Healthy Caribbean Coalition. Welcome page. Available at: http://www.healthycaribbean.org. Last accessed March 7, 2012.
15. InterAmerican Heart Foundation. Home page. Available at: www.healthylatinamericacoalition.org. Last accessed March 7, 2012.
16. PAHO. Non-communicable diseases basic indicators 2011: minimum, optimum, and optional data set for NCDs. Available at: http://new.paho.org/hq/index.php?option=com_content&task=view&id=1930&Itemid=1708&lang=en. Last accessed March 7, 2012.
17. Centers for Disease Control and Prevention. Global school-based student health survey. Available at: http://www.cdc.gov/gshs/. Last accessed March 7, 2012.
18. Expert Group on Dietary Salt Reduction in the Americas. Cardiovascular disease prevention through dietary salt reduction. Available at: http://new.paho.org/hq/index.php?option=com_content&task=view& id=2015&Itemid=1757. Accessed January 21, 2012.
19. PAHO. National capacity for the management of chronic diseases in Latin America and the Caribbean. Washington, DC: PAHO; 2009.
20. WHO. Global strategy on diet, physical activity and health: marketing of foods and non-alcoholic beverages to children. Available at: http://www.who.int/dietphysicalactivity/marketing-food-to-children/en/index.html. Last accessed March 7, 2012.