

ECLAC SUBREGIONAL HEADQUARTERS FOR THE CARIBBEAN



Magazine of the Caribbean Development and Cooperation Committee (CDCC)

# NON-COMMUNICABLE DISEASES AND THEIR IMPACT ON SUSTAINABLE DEVELOPMENT

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HARMANN TENSOVal.

# ABOUT ECLAC/CDCC

The Economic Commission for Latin America and the Caribbean (ECLAC) is one of five regional commissions of the United Nations Economic and Social Council (ECOSOC). It was established in 1948 to support Latin American governments in the economic and social development of that region. Subsequently, in 1966, the Commission (ECLA, at that time) established the subregional headquarters for the Caribbean in Port of Spain to serve all countries of the insular Caribbean, as well as Belize, Guyana and Suriname, making it the largest United Nations body in the subregion.

At its sixteenth session in 1975, the Commission agreed to create the Caribbean Development and Cooperation Committee (CDCC) as a permanent subsidiary body, which would function within the ECLA structure to promote development cooperation among Caribbean countries. Secretariat services to the CDCC would be provided by the subregional headquarters for the Caribbean. Nine years later, the Commission's widened role was officially acknowledged when the Economic Commission for Latin America (ECLA) modified its title to the Economic Commission for Latin America and the Caribbean (ECLAC).

### Key Areas of Activity

The ECLAC subregional headquarters for the Caribbean (ECLAC/CDCC secretariat) functions as a subregional think-tank and facilitates increased contact and cooperation among its membership. Complementing the ECLAC/CDCC work programme framework, are the broader directives issued by the United Nations General Assembly when in session, which constitute the Organisation's mandate. At present, the overarching articulation of this mandate is the United Nations Sustainable Development Goals.

Towards meeting these objectives, the Secretariat conducts research; provides technical advice to governments upon request; organizes intergovernmental and expert group meetings; helps to formulate and articulate a regional perspective within global forums; and introduces global concerns at the regional and subregional levels.

Areas of specialization include trade, statistics, social development, science and technology, and sustainable development, while actual operational activities extend to economic and development planning, demography, economic surveys, assessment of the socio-economic impacts of natural disasters, climate change, data collection and analysis, training, and assistance with the management of national economies.

The ECLAC subregional headquarters for the Caribbean also functions as the Secretariat for coordinating the implementation of the Programme of Action for the Sustainable Development of Small Island Developing States. The scope of ECLAC/CDCC activities is documented in the wide range of publications produced by the subregional headquarters in Port of Spain.

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Border closures, curfews, restriction on business operations, physical distancing, and limitations on social and religious gatherings have been implemented by governments throughout the Caribbean subregion to control the spread of the disease. Such efforts, though necessary to limit new infections, have resulted in economic shut down to varying degrees across Caribbean countries and territories.

Caribbean governments have also implemented a range of fiscal and other related measures in an effort to alleviate the economic hardship caused by the pandemic. These included financial bailout for businesses and salary relief grants, food and nutrition support, moratorium on mortgage and rent payments, and suspension of utility and tax liability payments for individuals and households. For 2020, ECLAC estimated the cost of the employment and social protection measures announced by governments of the subregion to be about US\$ 1.3 billion.<sup>1</sup>

Caribbean governments have been swift in their response to the COVID-19 pandemic, a communicable disease that disproportionately causes severe illness and deaths in persons with underlying health conditions that include non-communicable diseases (NCDs) such as cardiovascular disease, diabetes, chronic respiratory disease and cancer. The actions taken show the priority that Caribbean leaders accord public health and the socioeconomic wellbeing of the subregion. Although coming at significant economic costs –

# many of which are still accruing— the interventions have contributed to relatively low rates of COVID-19 infection and death in most Caribbean countries at this point. These measures have also prevented a dreaded scenario of overburdened health systems, most of which are already fragile. Given all that could have potentially gone wrong, the Caribbean has done a decent job in managing the pandemic thus far.

NON-COMMUNICABLE DISEASES AND THEIR

The health of the Region is the wealth of the Region. These are the words of the Caribbean Community (CARICOM) Heads of Government in the Nassau Declaration on Health in 2001. Twenty years later, these words ring true. The COVID-19 pandemic

IMPACT ON SUSTAINABLE DEVELOPMENT

has destabilized Caribbean economies in a way no shock has ever done.

**DIRECTOR'S DESK:** 

However, there is another epidemic, a silent one, spreading fast in the Caribbean. That is the NCD epidemic. The Caribbean continues to be one of the subregions of the world with the highest prevalence of these diseases, constituting a significant burden of disease to healthcare systems. Imagine that at least half of all deaths annually in any Caribbean country is as a result of NCDs. This rate is as high as 83 per cent for Barbados.<sup>2</sup> Meanwhile, the trend in the NCD disease burden is likely to worsen in the coming decades as childhood obesity is unacceptably high in the Caribbean.<sup>3</sup>

In economic terms, the burden of disease attributable to NCDs is significant. The economic cost of two NCDs, diabetes and hypertension, was estimated to be the equivalent of 1.35 per cent of the Gross Domestic Product (GDP) of the Bahamas; 5.34 per cent of the GDP of Barbados; 5.87 per cent of the GDP of Jamaica; and 8 per cent of the GDP of Jamaica; and 8 per cent of the GDP of Trinidad and Tobago in 2001.<sup>4</sup> With prevalence higher now than they were 20 years ago, and given that increasing number of Caribbean children are at the risk of developing NCDs in adulthood, it is conceivable that the economic burden of NCDs is currently far greater than it was in 2001.

Often referred to as the 'silent killers', the cost of NCDs is not limited to the obvious cost of medical care. The indirect costs, consisting of the cost of lost productivity from disease-induced disability and disease-related premature deaths, could be significant too in the Caribbean. This is particularly so for a subregion that is ageing fast, and will need to devote additional resources to care for an increasing number of older persons that will develop these NCDs.

Although the Caribbean has a good history of instituting frameworks for NCD prevention and control, most notably the 2007 landmark "Declaration of Port-of-Spain: Uniting to Stop the Epidemic of Chronic NCDs," there have been lapses in implementation. The COVID-19 pandemic, however, has drawn a new focus on NCDs and their adverse impacts, not only on health but also on economic productivity. As countries of the subregion strategize on recovery measures that are expected to lead to an economic rebound post-pandemic, health and well-being is an obvious priority. These circumstances foster new opportunities to address NCD prevention and control in a holistic manner.

► (continued on page 12)

<sup>1</sup> Economic Commission for Latin America and the Caribbean (ECLAC), The Caribbean Outlook: forging a people-centred approach to sustainable development post-COVID-19 (LC/SES.38/12), Santiago, 2020.

<sup>4</sup>Abdulkadri, A. O., Cunningham-Myrie, C. and Forrester, T. (2009), "Economic burden of diabetes and hypertension in CARICOM States", Social and Economic Studies, 58 (3&4): 175-197.

<sup>&</sup>lt;sup>2</sup> WHO (2018). Non-communicable Diseases Country Profiles, 2018.

<sup>&</sup>lt;sup>3</sup> See Healthy Caribbean Coalition, Childhood Obesity Factsheets (December 2019; based on WHO 2016 estimates)



pdated global, regional and national estimates on the burden of non-communicable diseases were published recently, from two separate but related sources. Results from the Global Burden of Disease Study 2019 coordinated by the Institute for Health Metrics and Evaluation (IHME) were published in October 2020 and, the World Health Organization (WHO) released their disease burden statistics, known as the Global Health Estimates, in December 2020.

The World Health Organization played a leading role in the early Global Burden of Disease (GBD) studies, the first of which was for the year 1990 (published in 1993). WHO continued to publish periodic updates to these estimates but starting in 2010, coordination of the GBD studies has been led by the IHME, a research institute at the University of Washington in Seattle. In line with its mandate as the official repository of international health data, WHO continues to publish disease burden statistics which, to avoid confusion, it now refers to as the Global Health Estimates (GHE). There is, therefore, a "choice" of estimates from the United Nations system and from academia. Mathers (2020)<sup>3</sup> discusses

# THE SITUATION OF NON-COMMUNICABLE DISEASES IN THE CARIBBEAN

Francis Jones \*

The prevention and control of non-communicable diseases (NCDs) is a national priority for many Caribbean countries<sup>1</sup> and member States of the Caribbean Community (CARICOM) have made good progress in developing National NCD Plans and setting time-bound targets for addressing NCDs,<sup>2</sup> including setting up operational multisectoral national strategies or action plans that integrate the major NCDs and their shared risk factors. The availability of relatively comprehensive statistics on NCD risk factors and prevalence makes it possible to quantify the scale of the problem and, over time, to monitor the success or failure of prevention and control measures.

some of the challenges which led to this parallel publication of datasets and the need for users of international health statistics to be aware of the two sources and the possibility of variations between them.

Estimates of the disease burden due to NCDs from the two datasets do appear to be at least broadly similar for Caribbean countries (those for which data was available from both sources). Figure 1 compares estimates of Disability Adjusted Life Years<sup>4</sup> (DALYs) due to NCDs per 100,000 population from the GBD 2019 with estimates based on the WHO's GHE 2019.5 The comparison demonstrates that the estimates for most countries are similar (within five per cent) although there are larger differences for Belize, Jamaica and Trinidad and Tobago (differences of between 5 and 15 per cent). This article has drawn more heavily on the GBD estimates primarily because it included data for an additional five Caribbean countries,6 included annual time series (rather than point estimates for selected years), and the presentation of rates per 100,000 population in this dataset also made cross-country comparisons easier.

The burden of NCDs on the Caribbean<sup>7</sup> population has been increasing since the early 2000s (figure 2). Europe is the region with the highest number of DALYs per 100,000 population; the Americas is second highest and, as shown in figure 2, the estimated disease burden for the Caribbean in 2019 was very close to the estimate for the Americas as a whole.8 Unhealthy lifestyles are a major reason for the high disease burden attributable to NCDs in both Europe and the Americas.<sup>9</sup>

The NCD burden is much higher for older persons and the very young (less than one-year-old) (figure 3). For persons aged 50 and over and those under 10 years, the rates for men are higher than those for women but for persons aged between 10 and 49 years the reverse is true. In 2019, the number of DALYs per 100,000 population, among Caribbean countries, ranged from approximately 16,500 in Belize to 33,400 in United States Virgin Islands (figure 4). All countries except Haiti<sup>10</sup> have had an increase in the burden of NCDs between 2000 and 2019.

Cardiovascular diseases accounted for the largest proportion of the Caribbean's NCD disease burden in 2019 (24 per cent), followed by neoplasms including cancer

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<sup>2</sup>Abdulkadri, Abdullahi and others (2021), "Addressing the adverse impacts of non-communicable diseases on the sustainable development of Caribbean countries", Studies and Perspectives series - ECLAC Subregional Headquarters for the Caribbean, No. 100 (LC/TS.2021/4-LC/CAR/TS.2021/2), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC).

<sup>3</sup>Mathers, Colin (2020), "History of global burden of disease assessment at the World Health Organization", Archives of Public Health Vol. 78 Article 77, August. <sup>4</sup> The disability-adjusted life year is a widely used measure of the burden of disease. DALYs are calculated as the sum of years of life lost (YLLs) and years lived with disability (YLDs) and therefore one DALY can be thought of as one lost year of healthy life.

<sup>5</sup> The World Health Organization's Global Health Estimates 2019 present total DALYs and therefore the rate per 100,000 population shown in Figure 1 was calculated using population estimates from the Population Division of the United Nations Department of Economic and Social Affairs (World Population Prospects 2019). <sup>6</sup> Data for Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago are available in both the IHME's GBD Study and the WHO's Global Health Estimates, while data for Bermuda, Dominica, Puerto Rico, Saint Kitts and Nevis and United States Virgin Islands are only available in the GBD Study.

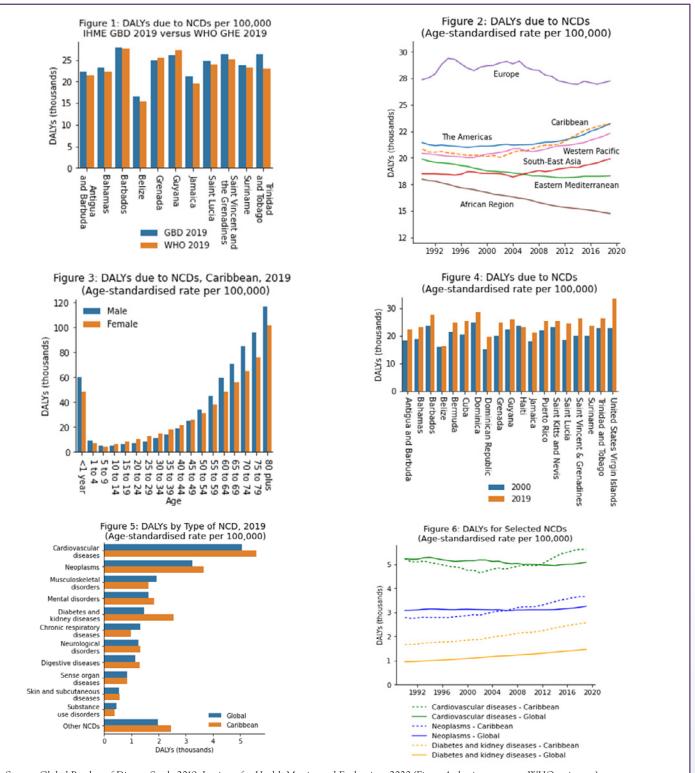
<sup>8</sup> WHO regions.

<sup>&</sup>lt;sup>7</sup> The definition of the Caribbean used in the IHME's GBD 2019 study includes Cuba, Dominican Republic, Haiti and Puerto Rico as well as Belize, Guyana, Suriname and another twelve English-speaking countries and territories.

<sup>&</sup>lt;sup>9</sup> TSee for example: Ng and others, 2014, "Global, Regional, and National Prevalence of Overweight and Obesity in Children and Adults during 1980-2013: A Systematic Analysis for the Global Burden of Disease Study 2013", The Lancet Vol. 384 Issue 9945, August.

<sup>&</sup>lt;sup>10</sup> Haiti is one of three Caribbean countries that have not set any of the nine targets under the Global Action

Plan for the Prevention and Control of NCDs 2013–2020.



Source: Global Burden of Disease Study 2019, Institute for Health Metrics and Evaluation, 2020 (Figure 1 also incorporates WHO estimates).

(16 per cent), and diabetes and kidney diseases (11 per cent) (figure 5). The burden of diabetes and kidney diseases is particularly high compared to the global average, equivalent to 2,560 DALYs per 100,000 population compared to a global average of 1,460. The Caribbean rate for diabetes is 89 per cent higher than the global average and that for kidney disease, 55 per cent higher. The disease burden attributable to each of these three broad

categories of diseases is on an upward trend in the Caribbean (figure 6).

The data presented in this article provides an overview of the NCD burden on the Caribbean population and makes clear that NCDs are an increasing threat to health, well-being and sustainable development. This is a global challenge which affects all countries in different ways and so national health policies need to prioritize, addressing the diseases and risk factors which are most prevalent within each population and subpopulation. The GBD and GHE datasets provide scope for much more detailed analysis than appears here, and should serve as important resources for health analysts involved in policy development and monitoring, as part of ongoing efforts to reduce the burden of NCDs.



Ithough mostly preventable, NCDs account for more than half of all deaths in Caribbean countries.<sup>2</sup> They also cause significant morbidity (temporary and permanent disabilities) and mortality (premature death) that have dire implications for the productivity of Caribbean small island developing States (SIDS). Furthermore, NCDs result in high costs of treatment that form a substantial portion of household expenditures<sup>3</sup> and which constitute a barrier to healthcare.<sup>4</sup>

NCDs have long been recognized by Caribbean political leaders as a health issue with negative implications for development. By asserting that "the health of the Region is the wealth of the Region" in the Nassau Declaration of 2001,<sup>5</sup> the Caribbean Community (CARICOM) Heads of Government had set the stage for what would become the Caribbean Commission on Health and Development (CCHD). In its report submitted in 2006, the CCHD emphasized that "a healthy population is an essential prerequisite for the economic growth and stability of the

# NON-COMMUNICABLE DISEASES: A BANE TO CARIBBEAN PRODUCTIVITY AND DEVELOPMENT

Abdullahi Abdulkadri \*

Non-communicable diseases (NCDs), a group of chronic diseases that include cardiovascular diseases, cancer, chronic respiratory diseases, and diabetes, are a major health challenge in the Caribbean.<sup>1</sup> They are detrimental to the health and well-being of citizens and constitute a bane to the economic health of States. In general, these diseases share common risk factors that include alcohol consumption, salt and sodium intake, tobacco use, physical inactivity, and overweight and obesity. These risk factors are prevalent in the Caribbean and on the rise in some countries.

Caribbean"<sup>6</sup> and identified NCDs as major contributors to overall mortality. Hence, they recommended that these diseases be tackled effectively.

In continuation of the impressive subregional cooperation on health, CARICOM Heads of Government again committed in 2007 to address the problem of NCDs through the "Declaration of Port of Spain: Uniting to Stop the Epidemics of Chronic NCDs".7 This Declaration contained 26 commitments for NCD prevention and control, including the reduction of the associated risk factors and improvement in access to preventative care. Complementing this pioneering framework is the Global Action Plan for the Prevention and Control of NCDs 2013-2020 as well as the specific NCD target of the Sustainable Development Goals (SDGs) and the NCD commitments of the SIDS Accelerated Modalities of Action (SAMOA) Pathway. Arguably, there are sufficient platforms for addressing the NCD problem. Why then does the problem persist, even worsening in

# some areas?

NCD prevention and control in the Caribbean have been hindered by implementation gaps. These gaps include policy and institutional gaps, technical capacity gaps, and heath financing gaps.8 The Caribbean Public Health Agency (CARPHA) recently released its Caribbean Cooperation in Health-IV Report 2020 (CARPHA 2020)<sup>9</sup> covering five strategic priority areas and strategic objectives<sup>10</sup> with a focus on regional public goods (RPGs), including an assessment of progress made on the thirteen priority RPGs identified at the 25th Meeting of Caribbean Chief Medical Officers in April 2017. Of these 13 priorities, four were reported to be in place (that is, already implemented), two were in progress (or partially implemented), and five were not in place (either not initiated or significantly fell short of being partly implemented). No information was available on the progress on the remaining two.11

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- <sup>6</sup>See: http://iris.paho.org/xmlui/bitstream/handle/123456789/9995/9789768082206\_eng.pdf?sequence=1&isAllowed=y.
- <sup>7</sup>See: https://caricom.org/declaration-of-port-of-spain-uniting-to-stop-the-epidemic-of-chronic-ncds/

<sup>9</sup>See CARPHA (2020).

<sup>11</sup> These are the regional legislation for nutritional labelling and the common clinical guidelines and auditing tools for national NCD programs regional public goods.

<sup>&</sup>lt;sup>1</sup>Abdulkadri, Abdullahi and others (2021), "Addressing the adverse impacts of non-communicable diseases on the sustainable development of Caribbean countries", Studies and Perspectives series - ECLAC Subregional Headquarters for the Caribbean, No. 100 (LC/TS.2021/4-LC/CAR/TS.2021/2), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC).

<sup>&</sup>lt;sup>2</sup> WHO's Non-communicable Diseases Country Profiles of 2018 showed that NCDs accounted for the lowest percentage of all deaths in Haiti (57%) while they accounted for the highest percentage in Barbados (83%) among all Caribbean countries.

<sup>&</sup>lt;sup>3</sup> Murphy A. and others (2020), "The household economic burden of non-communicable diseases in 18 countries". BMJ Global Health; 5:e002040. doi:10.1136/ bmjgh-2019-002040

<sup>&</sup>lt;sup>4</sup> Alleyne, D. (2010).

<sup>&</sup>lt;sup>5</sup> Nassau Declaration on Health 2001: The Health of the Region is the wealth of the Region.

<sup>&</sup>lt;sup>8</sup> See: POSDEVAL Research Group (2017), Kirton and others (2018), Murphy and others (2018), and Samuels and Unwin (2018) for detailed evaluation reports on the implementation of the Declaration of Port of Spain.

<sup>&</sup>lt;sup>10</sup> These are Health Systems for universal access to health and universal health coverage; Safe, resilient, healthy Environments; Health and well-being of Caribbean people throughout the life course; Data and evidence for decision making and accountability; and Partnership and resource mobilization for health.

The report also listed four challenges to the achievements of the milestones specific to the RPGs (see Box 1).

Box 1. Four challenges to the achievements of the milestones specific to the RPGs.

I. The absence of a detailed action plan or work plan;

2. The lack of funding to implement initiatives at the regional and national level;

3. The absence of a financing/resource mobilization strategy and mechanisms in support of the achievements of the CCH-IV objectives; and

4. The need for improved multisectoral coordination and leadership to advance the CCH-IV Agenda.

Notably, two of the four challenges are related to funding and financial resources. Meanwhile under the strategic priority area of "Health Systems for universal access to health and universal health coverage," the regional public good of creating a "Regional repository of health and economic impact data for varying disease conditions" is the only RPG within the health financing category on which there was no information. The lack of information on the economic impact of diseases is a major missing link in the fight against NCDs in the Caribbean. Whilst ample evidence exists to show the disease burden of NCDs, only dated or sparse current information is available on the economic burden of these diseases in the subregion. For example, Bloom and others (2010) estimated the value of the global cumulative loss of output with

respect to cardiovascular disease, chronic respiratory disease, cancer, diabetes and mental health between 2010 and 2030 to be US\$ 47 trillion, which was equivalent to 75 per cent of global gross domestic product (GDP) in 2010 (US\$ 63 trillion). This amount was also shown to be enough money to eradicate two dollara-day poverty among the 2.5 billion people that live in this state for more than half a century.<sup>12</sup> Such is the power of economic burden of disease analysis to convey to decision makers the tradeoffs that are involved in not directing resources to the fight against NCDs.<sup>13</sup>

Caribbean, In the the most comprehensive subregional economic burden of disease study conducted, was based on 2001 data<sup>14</sup> and only limited to four CARICOM member States. In a geopolitical space where at least half of all deaths is due to NCDs, more needs to be done to highlight the economic burden that these diseases pose to the health of individuals and to the economic health of States. For instance, a recent study estimated the economic burden of all NCDs in the United States over 2015-2050 to be US\$265,000 per capita, corresponding approximately to an annual tax rate of 10.8 per cent on aggregate income.<sup>15</sup> A similar analysis done for the Caribbean will provide a quantitative monetary measure of what those in health policy arena already know, but in the language that the political leadership more readily understands.

In another recent study, obesity from childhood to midlife, together with elevated systolic blood pressure, and high serum total cholesterol, were reported to be inversely associated with midlife cognitive performance. The authors noted that "the higher the number of cardiovascular risk factors, the worse was the observed cognitive performance. Therefore, launching preventive strategies against cardiovascular risk factors beginning from childhood might benefit primordial promotion of cognitive health in adulthood".<sup>16</sup> With the rising prevalence of obesity among Caribbean children, quantifying the economic repercussions of this type of finding will help to make the economic case for the investments required to control the trend, and prevent the development of obesity among children that are predisposed to it.

When viewed from the perspective of development, NCDs have been noted to constitute a barrier to the achievement of specific Sustainable Development Goals (SDGs).<sup>17</sup> When these diseases are addressed, in addition to promoting SDG 3 (Good Health and Well-being), productivity gains from preventing and managing NCDs are expected to contribute to SDG 8 (Decent Work and Economic Growth). Furthermore, pursuing SDGs 11 (Sustainable Cities and Communities) and 12 (Responsible Consumption and Production) provide enabling environments for reducing the disease burden of NCDs while creating sustainable and healthy cities.<sup>18</sup>

▶ (continued on page 13)

<sup>&</sup>lt;sup>12</sup> Bloom, D.E., Cafiero, E.T., Jané-Llopis, E., Abrahams-Gessel, S., Bloom, L.R., Fathima, S., Feigl, A.B., Gaziano, T., Mowafi, M., Pandya, A., Prettner, K., Rosenberg, L., Seligman, B., Stein, A.Z., & Weinstein, C. (2011). The Global Economic Burden of Non-communicable Diseases. Geneva: World Economic Forum.

<sup>&</sup>lt;sup>13</sup> While argument could be made about the economic trade-off involved in implementing NCD prevention and control measures that may adversely affect the profitability of other sectors (e.g., the fast food, beverages, and tobacco industries) and the implication for government tax receipts, there is growing evidence to support the effective use of fiscal policies to achieve positive health outcomes with net gain in tax revenues and welfare. See Chaloupka, F. and others (2020) and PAHO (2020) for detailed analysis. <sup>14</sup> See: Abdulkadri, Cunningham-Myrie and Forrester (2009).

<sup>&</sup>lt;sup>15</sup> Chen, S., Kuhn, M., Prettner, K., & Bloom, D. E. (2018). "The macroeconomic burden of non-communicable diseases in the United States: Estimates and projections." PloS one, 13(11), e0206702. https://doi.org/10.1371/journal.pone.0206702

<sup>&</sup>lt;sup>16</sup> See: Hakala, J.O. and others (2021, p. 1949). "Cardiovascular Risk Factor Trajectories Since Childhood and Cognitive Performance in Midlife. The Cardiovascular Risk in Young Finns Study." Circulation. 2021;143:1949-1961. DOI: 10.1161/CIRCULATIONAHA.120.052358.

 <sup>&</sup>lt;sup>17</sup> Namely SDG 1 (No poverty), SDG2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), SDG 5 (Gender Equality), SDG 8 (Decent Work and Economic Growth), SDG 10 (Reduced inequalities), SDG 11 (Sustainable Cities and Communities), and SDG 12 (Responsible Consumption and Production).
<sup>18</sup> Nugent, R. (2018). "Investing in non-communicable disease prevention and management to advance the Sustainable Development Goals." The Lancet Task Force on NCDs and Economics, Volume 391, Issue 10134, P2029-2035, May 19, 2018.



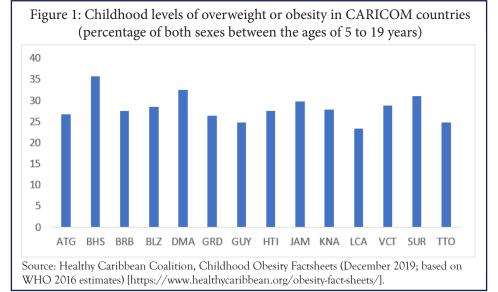
he rise in childhood obesity has been recognized by Caribbean Heads of Government as "the greatest threat to the health of future generations," with the rate of overweight and obesity reported to be more than 30 per cent among primary and secondary school populations in the Member States of the Caribbean Community (CARICOM).<sup>1</sup> According to the Healthy Caribbean Coalition,<sup>2</sup> a Caribbean Non-Communicable Diseases alliance of over 100 organisations, one in three children in the subregion is obese and at risk for developing a non-communicable disease. Current estimates within the subregion show that the prevalence rate of overweight and obesity among persons aged 5-19 years ranges between 23.4 per cent in Saint Lucia and 35.8 per cent in the Bahamas. These figures are significantly higher than the global prevalence rate of about 18 per cent.

The problem of overweight and obesity in children is being driven by a nutritional transition, with a move away from locally grown food, including fruits, vegetables and meats to easily accessible processed food and beverages with high amounts of fat and sugar.<sup>3</sup> The Caribbean has also seen an increase in sedentary lifestyles, with less than a third of school children aged 13–15 years attaining the recommended level of physical activity.<sup>4</sup> Furthermore, a recent ECLAC meeting on non-communicable diseases in the

# CHILDHOOD OBESITY: A WARNING SIGN FOR CARIBBEAN DEVELOPMENT

Candice Gonzales \*

Over the last two decades, Caribbean governments have made considerable progress in the overall health status of children and adolescents. Despite this, the increasing prevalence of childhood overweight and obesity presents a concerning public health challenge.



Caribbean reported that the COVID-19 pandemic, due largely or in part to lockdown measures, has exacerbated the risk of unhealthy behaviours such as consumption of unhealthy diets and lack of physical activity, which contribute to overweight and obesity in children.<sup>5</sup>

If left unchecked, childhood overweight and obesity will have adverse consequences for the health and productivity of the subregion's future adult population. Ultimately, this phenomenon in the younger populations is one of the main predictors of the prevalence of NCDs in adulthood which can burden already fragile healthcare and social security systems, and by extension the efficiency of Caribbean economies due to a decline in labour productivity from an unhealthy workforce.

The subregion has always recognized childhood obesity as a health challenge that must be addressed. The Plan of Action for Promoting Healthy Weights in the Caribbean: Prevention and Control of Childhood Obesity (2014-2019), developed by the Caribbean Public Health Agency (CARPHA), aimed to halt and reverse the rise in child and adolescent obesity in the Caribbean by 2025, through the implementation of technical cooperation with CARICOM member States. In addition, the outcome of the Caribbean small island developing States (SIDS) preparatory meeting for the 2019 mid-term review of the SIDS Accelerated Modalities of Action (SAMOA) Pathway, identified the rise

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- <sup>2</sup> See: https://www.healthycaribbean.org/.
- <sup>3</sup>See: http://pubs.sciepub.com/jfs/3/6/1/.

<sup>&</sup>lt;sup>4</sup>See: https://www.healthycaribbean.org/.

<sup>&</sup>lt;sup>5</sup>See: https://repositorio.cepal.org/handle/11362/46497.

in NCDs in SIDS. The meeting also emphasized the promotion of healthy lifestyles among children and adolescents "through school programmes, public media, including skills to resist tobacco use and other substance abuse, healthy eating and affordable nutrition, movement and exercise, tax measures on sugary drinks and all foods with added sugar and stress management and mental health care."<sup>6</sup>

Several initiatives on childhood obesity prevention (COP) are being implemented at the national level.<sup>7</sup> Caribbean policy makers have taken significant steps to address food and nutrition deficiency among their populations in alignment with regional and global frameworks and have also embarked on initiatives specifically aimed at preventing childhood obesity. Antigua and Barbuda and Dominica have implemented taxes on fast food and sugary beverages, while Guyana and Saint Lucia have introduced subsidies on local fruits and vegetables. mandatory Additionally, physical education and nutritional guidelines have been implemented in most Caribbean schools as part of their educational outreach to promote the importance of healthy lifestyles. Following the launch of the "Caribbean Moves" initiative in 2018, Barbados, Jamaica, Saint Kitts and Nevis, and Trinidad and Tobago initiated their national versions of health promotion campaigns, to encourage and sensitize their populations to live healthier lifestyles to reduce the incidence of NCDs. Caribbean Governments have also promoted school programmes such as "Water Wednesdays" to encourage the increased consumption of water as a healthier alternative to sugar-sweetened beverages, and implemented "Fruit Fridays" to encourage the inclusion of more fruits and vegetables for a balanced diet instead of sugar-laden and sodium rich snacks. These school programmes play a crucial role in teaching children

about healthy eating habits and reinforcing those lessons through good school practices, which are further shared outside the classroom to parents, other family members and friends.

While there have been some efforts to promote physical activity among the general population, physical inactivity among children and adolescents have remained high and constitutes a major concern which had not been vigorously addressed until recently. Initiatives to promote school environments for healthy eating, such as restrictions on the sale of sugar-sweetened beverages and facilitate increased physical activity, must continue to be priority actions to effectively address the growing prevalence of childhood obesity. Teacher training on the effects of NCDs and public health education campaigns on nutrition for both adults and children, must also continue be a part of national health strategies. Additionally, the COVID-19 pandemic further highlights the need for the Caribbean to refocus attention on childhood overweight and obesity, to ensure that the future burden of NCDs does not reverse the gains made to overall sustainable development.

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<sup>&</sup>lt;sup>6</sup> See: https://sustainabledevelopment.un.org/content/documents/20630San\_Pedro\_Declaration\_final\_version.pdf

<sup>&</sup>lt;sup>7</sup> For a comprehensive snapshot of national actions, see https://www.healthycaribbean.org/wp-content/uploads/2019/12/COPS-Grid-December-2019-WEB.pdf.



ased on the early research currently available, there is overwhelming evidence of the vulnerability of persons suffering from NCDs to COVID-19. Studies have indicated that the odds of mortality for COVID-19 patients with diabetes are around three times those for patients without diabetes. Some studies have found that persons suffering from cardiovascular diseases face similar risks from the virus. Patients with chronic obstructive pulmonary disease were found to be at nearly twice the risk of severe illness. Studies have also found links between cancer (or a history of cancer) and negative COVID-19 outcomes. (WHO and UNDP, 2020).

More generally, NCD risk factors such as tobacco and alcohol consumption, physical inactivity and unhealthy diets are also linked to worse outcomes for COVID-19 patients. Tobacco smoking directly increases vulnerability to respiratory infectious diseases while obesity is strongly linked to severe COVID-19 illness and mortality. One study found that for persons with a body mass index of greater than 35, the odds of severe illness were seven times higher. (WHO and UNDP, 2020).

The increased vulnerability of persons suffering from NCDs (and older persons) led some to argue that COVID-19 protection measures could focus primarily on shielding these highrisk groups, thereby allowing the rest of the population to continue with a more normal life (see the Great Barrington Declaration). High-risk population groups should certainly have access to

# COVID-19 IN AN ENVIRONMENT OF HIGH NCD PREVALENCE: PANDEMIC OR SYNDEMIC?

Francis Jones \*

As COVID-19 spread across the globe during the first months of 2020, it quickly became clear that persons with non-communicable diseases (NCDs) were at significantly greater risk of severe illness and death. For those contracting the virus, underlying health conditions, together with age, are major determinants of both severity of illness and mortality.<sup>1</sup> The Caribbean has a relatively high disease burden attributable to NCDs, having high rates of diabetes in particular. This reinforces the need to both prevent and control the spread of COVID-19 while alleviating the burden of NCDs on population health and well-being.

information, PPE, and support to enable them to protect themselves. However, in practice, it is quite difficult to isolate certain groups from the rest of the population and, in general, prevention and control of COVID-19 has been most effective where governments have been successful in preventing infection among the whole population. In countries where there has been widespread community transmission, the virus has spread to people in high-risk groups through their families, friends, colleagues, carers or others, in a very similar way to how it has spread through the population as a whole. Measures to protect high-risk groups do not, therefore, obviate the need for population-wide measures.

It has been argued that the links between COVID-19 and NCDs are such that instead of being thought of as a pandemic, COVID-19 is better understood as a "synergistic epidemic" or a "syndemic" (Horton, 2020). A syndemic refers to a set of linked health conditions, interacting synergistically with both biological and social interactions that are important for prognosis, treatment, and health policy. COVID-19 is interacting with a range of non-communicable diseases (NCDs), together with socioeconomic factors such as poverty and inequalities in access to healthcare, adequate housing and proper sanitation, which create differential levels of susceptibility to these health conditions. The syndemic lens emphasizes the need to address not just COVID-19, but also the underlying NCDs and the socioeconomic factors.

The idea of a syndemic becomes more relevant when efforts to prevent the spread of the virus have failed (Mendenhall, 2020). In countries where transmission of COVID-19 was largely prevented, this was achieved precisely through an epidemiological approach to pandemic control and, as a result, COVID-19 is not regarded as a syndemic in Vietnam or New Zealand. Pandemic control measures therefore remain the first line of defence. In most Caribbean countries, prevention and control measures have ensured that COVID-19 infection and mortality rates are below the global average, although mostly without achieving the very low rates seen in countries such as Vietnam and New Zealand.

COVID-19 pandemic The (or syndemic) also has the unfortunate effect of undermining general health care services. Government restrictions, fear of the virus, and reduced income, all act as disincentives for patients to present themselves for treatment. Health systems themselves are also diverting resources to deal with the pandemic, which inevitably has consequences for prevention, care, and treatment services for other conditions, including NCDs. Delayed diagnosis and treatment lead to worse clinical outcomes. Managing the pandemic to minimize its health impacts therefore means not only being concerned about illness and death which is directly attributed to COVID-19, but also maintaining sufficient service continuity to minimize morbidity and mortality caused by other conditions going undetected or untreated.

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<sup>&</sup>lt;sup>1</sup> Francis Jones is the Population Affairs Officer in the Statistics and Social Development Unit at the ECLAC Subregional Headquarters for the Caribbean. <sup>1</sup> WHO and UNDP (2020), "Responding to NCDs during and beyond the COVID-19 pandemic-State of the evidence on COVID-19 and NCDs: a rapid review," Geneva: World Health Organization and the United Nations Development Programme (WHO/2019-nCoV/Noncommunicable\_diseases/Evidence/2020.1), Licence: CC BY-NC-SA 3.0 IGO.

Recent studies by ECLAC (2021) and the Healthy Caribbean Coalition (2021) have underscored the need for a renewed effort to reduce the burden of NCDs. ECLAC's report indicated that the Caribbean was not currently on track to achieve the SDG target 3.4 of a one-third reduction in premature deaths from NCDs by 2030. The Healthy Caribbean Coalition, meanwhile, called for a Transformative New NCD Agenda. Their report recommended building on existing interventions and programmes which are focused on life course prevention and universal health care, together with more participatory engagement of civil society and improved information and communication systems. The COVID-19 pandemic should serve as a wake-up call for Caribbean governments to re-focus on NCD prevention and treatment, both for the long-term health and well-being of the Caribbean population and to reduce vulnerability to future pandemics.

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# DIRECTOR'S DESK: NON-COMMUNICABLE DISEASES AND THEIR IMPACT ON SUSTAINABLE DEVELOPMENT

Most NCDs are preventable by addressing their common risk factors, and there is ample evidence on how this can be achieved. The World Health Organization, in its 2010 Global Status Report on NCDs, highlighted interventions at the individual and population levels that are deemed "best buys" and "good buys"<sup>5</sup> based on their cost-effectiveness, having established their efficacy.

Unfortunately, there is an important missing-link in the fight against NCDs in the Caribbean – the use of economics to drive policies and interventions. While the cost of health care in the public health system is routinely reported in government budgets, costs of care in the private health care systems are generally not systematically computed and much less so the indirect costs of disease, which, as stated earlier, could be quite substantial. Only when a systematic analysis of the economic losses incurred by Caribbean economies from absenteeism, presenteeism, temporary and permanent disability, and premature deaths from NCDs, in addition to the cost of treating these diseases, from the public and private purses, is done, can the true picture of the economic burden on NCDs be fully manifested. Then, investing in prevention and control, by implementing the "best buys" and some of the "good buys," will become economically appealing to policy makers, healthcare providers, employers, school administrators, and indeed all stakeholders.

In this edition of the FOCUS magazine, we attempt to make a case for NCDs to be seen not only as a health challenge, but one with long-lasting economic and development implications. To reinforce this message, we present a statistical overview of NCD trends in the Caribbean and touch on the COVID-19 pandemic and its interaction with NCDs. The issue also echoes the call by active health stakeholders, such as the Health Caribbean Coalition, for urgent attention to be paid to childhood obesity. At ECLAC, we contend that NCDs pose grave obstacles to a healthy Caribbean and a vibrant workforce that is essential for driving a sustained economic recovery post-pandemic. It is imperative, therefore, that greater investment be made to control and prevent NCDs as an integral part of sustainable development strategy in the Caribbean.

Yours in Focus

Diane Quarless

<sup>5</sup> A best buy is an intervention that is not only highly cost-effective but also cheap, feasible and culturally acceptable to implement. Good buys are other interventions that may cost more or generate less health gain but still provide good value for money. For further information on these concepts see, WHO (2011): Global Status Report on Non-communicable diseases 2010, page 47.

▶ (continued from page 7)

# NON-COMMUNICABLE DISEASES: A BANE TO CARIBBEAN PRODUCTIVITY AND DEVELOPMENT (CONTINUED)

As shown in the review of the Declaration of Port of Spain and the 2020 Report of the Caribbean Cooperation in Health-IV, health financing gap is a major hindrance to the promotion of health and well-being in the Caribbean.

Unfortunately, there is a dearth of economic studies that could provide policy makers with the economic evidence needed for investment in disease prevention and health promotion. With the known disease burden of NCDs in the Caribbean, it is high time to analyse the economic and development impacts of these chronic non-communicable diseases more systematically. Doing so will provide decision makers with compelling evidence to invest in health to grow national wealth (increase productivity) or avoid its decline (prevent productivity decline).

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# **RECENT AND UPCOMING MEETINGS**

# 2021

# JULY

# 13 July 2021

ECLAC's participation in the High Level Political Forum on Sustainable Development side-event "Potential implications of Carbon Dioxide Removal approaches on the Sustainable Development Goals in the African and the Latin America and Caribbean regions."

# 15 July 2021

High Level Political Forum - Development in Transition - Dialogues to chart new path for Latin American and the Caribbean

# 24 July 2021

Middle income strata, COVID-19 and the challenges of social protection, in the context of Development in Transition Days (DiT)

List of Recent ECLAC Documents and Publications

Listed by Symbol Number, Date and Title

# LC/CAR/TS.2021/2

# February 2021

Addressing the adverse impacts of non-communicable diseases on the sustainable development of Caribbean countries

# LC/TS.2020/161

# February 2021

The case for financing: Caribbean resilience building in the face of the COVID-19 pandemic

# LC/TS.2021/1

# March 2021

Economic Survey of the Caribbean 2020: Facing the challenge of COVID-19

# LC/CAR/TS.2021/3/Rev.1

April 2021

Navigating transfer pricing risk in the oil and gas sector: essential elements of a policy framework for Trinidad and Tobago and Guyana.







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