The Latin America and the Caribbean Code Against Cancer: A collaborative effort for cancer prevention

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Cancer prevention is the most cost-effective strategy that countries have, to contain and revert the increasing numbers in cancer cases and deaths worldwide. The Latin America and the Caribbean Code Against Cancer first edition is a cancer prevention instrument to raise awareness to about the established risk factors and effective preventive actions and interventions, to guide governments of Latin America and the Caribbean to implement the most urgent measures, and to build capacity to healthcare professionals and cancer prevention advocates.

ancer is already the leading cause of death in almost half of the countries of Latin America and the Caribbean, with 1.5 million new cancer cases (7.7% of all cases worldwide) and 700,000 deaths estimated in 2020 (7.3% of all deaths worldwide) (1), being prostate, breast, and colorectal cancers the most common ones. More alarmingly, this cancer burden is projected to increase by at least 67% reaching 2.4 million new cases annually by 2040 (2). The Latin America and the Caribbean Code Against Cancer first edition is a multi-risk factor cancer prevention educational tool to raise awareness to the public and policymakers about the established risk factors and existing effective preventive actions and interventions. It consists of 17 recommendations on primary and secondary prevention of cancer for the public of Latin America and the Caribbean, complemented by 17 recommendations related to the public policies and services that countries should invest in, to support primary prevention while strengthening health systems to provision early detection and subsequent effective treatment of cancer (3). The recommendations are divided in the following four groups of topics. Seven recommendations on lifestyle risk factors such as not using any type of tobacco, neither nicotine-related products in non-smokers, encouraging quitting, and respecting and promoting smoke-free places; achieving or maintaining a healthy weight throughout life, with support of daily physical activity and a healthy diet that includes fruits, vegetables and whole grains, limits red meat, ultra-processed foods and very hot beverages, and avoids processed meats, sugar-sweetened beverages and alcohol; and promoting breastfeeding (4,5). Four recommendations on environmental and occupational risk factors to protect oneself from sun exposure, including workers; to avoid

building up smoke from coal or firewood in households; to limit time outdoors when air pollution is high; and to find out the carcinogens in the workplace, and request and adopt the recommended protective measures (6). Two recommendations on infections and related interventions to screen and treat for the bacteria Helicobacter pylori, as well as for infections caused by hepatitis B and C viruses (HBV and HCV), human papilloma virus (HPV) and human immunodeficiency virus, in addition to vaccinating against HBV and HPV and to practise safe sex (7). And four recommendations on drugs and cancer screening, such as not using hormonal replacement therapy unless prescribed, and requesting the corresponding age-dependent screening methods for colorectal, breast and cervical cancers (8). The corresponding policy recommendations focus on population level interventions needed to set the infrastructure that will allow individuals to put in practice the cancer prevention messages, for example, implementing taxes and warning labels in harmful products, create healthy environments in the community, schools, and public buildings; implementing programmes to allow switching to cleaning energies, establishing environmental air quality standards and ensuring that economic activities will eliminate or at least control the use of carcinogenic substances; ensuring access to vaccines, diagnosis and treatment of infections, along with implementing sex education programmes; or prohibiting the over-the-counter sale of hormone replacement therapies for menopause, implementing secondary prevention programmes for colon and rectal cancer and ensuring early detection and treatment of breast and cervical cancers in alignment with the corresponding WHO Global Initiatives (3). In addition, the Code has also a specific output dedicated to the primary

healthcare professionals of the region, including physicians, nurses, pharmacists, psychologists, nutritionists, etc., to be hosted soon at the Pan-American Health Organization (PAHO) Virtual Campus for Public Health (9). It is a free 40-hour competency-based microlearning programme, containing not only a comprehensive learning module per recommendation, but also extra modules on communication to the patient, the social determinants of health, intercultural competencies, and other topics of interest for the primary healthcare professional.

The Latin America and the Caribbean Code Against Cancer first edition is the first regional adaptation of the European Code Against Cancer (10) under the umbrella of the World Code Against Cancer Framework (11), an initiative from the International Agency for Research on Cancer (IARC/WHO) that aims at transforming the knowledge from etiological cancer research and preventive interventions into actionable information. IARC, the World Health Organization (WHO) specialized agency on cancer research, has developed the methodology that includes a standard and iterative process to review and assess the regional epidemiological patterns, the socio-economic and cultural conditions (12), and also comprises communication research to test the understandability and persuasiveness of the messages in the general public (13). The Latin America and the Caribbean Code Against Cancer first edition was internationally launched on 17 October 2023, in a double event: a virtual launch organized by PAHO and a second event at the UICC World Cancer Leaders' Summit in California. These events were the culmination of almost three years of a scientific and communication project, with more than 60 experts from Latin America and the Caribbean with a balanced geographic and gender representation and key partners involved, guided by IARC and PAHO, and working in a collaborative manner with the common mission of promoting cancer prevention. The Code has been developed in Spanish and translated into English and Portuguese (14). The key features of the Latin America and the Caribbean Code Against Cancer first edition are:

- it is evidence-based, anchored in a thorough methodology supported by the credibility of authoritative organizations and sources of evidence;
- it translates the latest science on risk factors and preventive interventions into straightforward and concise messages for the people and policymakers;
- it is a specific tool for cancer prevention, considering those risks factors common to other noncommunicable diseases and those specific to cancer, as well as secondary prevention of cancer;
- it describes the priority actions for a region with a large diversity in geography, urbanization, developmental progress and wealth, literacy, culture, ethnicity, and access

- to healthcare resources, taking into consideration that not all countries are at same speed in implementation, and hence providing the roadmap for setting mid- and longterm targets to achieve reducing the burden of cancer;
- it is a multi-sectoral approach to tackle cancer as, unfortunately, the healthcare sector cannot do it alone;
- it contains the know-how from the region, as it has been developed by regional experts in a collaborative way, building consensus for all aspects (therefore, the Code has been developed "by the region and for the region");
- it puts the person in the centre, having been tested in the general public of several countries of Latin America and the Caribbean (Brazil, Peru, Colombia, Chile, and Puerto Rico) (13); and it provides primary healthcare professionals with the resources and competencies needed to promote prevention (9).

As mentioned, there has existed a Europe Code Against Cancer for more than 30 years (with the fifth edition currently under development) (10) that has served as a model to design and develop Regional Codes Against Cancer that will comprise the priorities for a given region and recommendations that are feasible and implementable. Yet, the Latin America and the Caribbean Code Against Cancer is not a quick adaptation of the European one, but a scientific exercise in itself, and moreover, it is pioneer in including public policy recommendations based on prevailing guidelines from WHO, PAHO, but also from other international organizations such as the International Labour Organization or UNAIDS, to name a few. These Regional Codes Against Cancer do not aim to replace national guidelines but rather to enable governments to commit to reach the recommendations as targets, to inform policy formulation and programmes, while empowering the individuals to follow the recommendations. However, to move from outputs to action, active and sustained dissemination, as well as step-wise implementation and adoption of the recommendations, at individual and population levels, needs to be ensured. The united action of regional stakeholders including governments, national cancer institutes, cancer patient organizations, medical associations and the academia is crucial to overcome the possible barriers for dissemination and implementation that would represent the fragmented health systems, the lack of access to up-to-date information, the lack of resources and/or prioritization, the lack of political will, or the excess of bureaucracy. Therefore, with the Latin America and the Caribbean Code Against Cancer first edition providing the most up to date, authoritative, and clear evidence-based recommendations for the general public, prioritizing the most effective, feasible and implementable cancer prevention interventions for policymakers to implement in the region,

Figure 1: Brief representation of the recommendations of the Latin America and the Caribbean Code Against Cancer first edition throughout the course of life. This infographic shows the relevance of each of the 17 recommendations throughout the life course: for example, many recommendations may apply from the infancy to older adulthood, such as achieving a healthy weigh, avoiding exposures to the sun or different kinds of air pollution; whereas recommendations on interventions such as vaccination or cancer screening are targeted to specific ages.



and allowing stakeholders to unite cancer prevention under universal and consistent messages, there is hope for Latin America and the Caribbean to curb the increasing cancer burden in the years to come.

Dr Carolina Espina, PhD, MPH has 14 years of professional experience in cancer prevention research and public health. She is the leader of the initiative "The World Code Against Cancer Framework" to educate the public, to guide policymaking and to build capacity in cancer prevention. She has led the development

of the European, and the Latin America and the Caribbean Codes Against Cancer and is leading the planning of an Asian one. In addition, she is involved in a variety of projects on implementation and dissemination research, and knowledge translation on cancer prevention. She has previously worked at the Pan-American Health Organization and the World Health Organization. She obtained her PhD degree in Molecular Biology of cancer, Master's degree in Public Health (Health Promotion) and Master's degree in Pharmacy.

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