

SOCIAL DISTANCING AND ECONOMIC CRISIS DURING COVID-19 PANDEMIC REDUCED CANCER CONTROL IN LATIN AMERICA AND WILL RESULT IN INCREASED LATE-STAGE DIAGNOSES AND EXPENSE

Position Paper

Since December 2019, the World has been mired in an infectious pandemic that has displaced other health priorities for 21st-century populations. The social significance and speed of contagion from the coronavirus pandemic have altered criteria for public health prioritization. This has been detrimental to other health problems, including non-communicable diseases (NCDs), which are recognized as the leading cause of preventable illness and premature death.

According to the World Health Organization (WHO), NCDs are responsible for three out of every four deaths in the World. Cancer is the second most frequent, after cardiovascular diseases.

Globally, cancer is one of the leading health challenges. In addition to its importance as a cause of death and suffering, there are increasing incidence rates and rising costs of health care in oncology.

In Latin America and the Caribbean, cancer ranks second as a cause of death, with 672,758 deaths from cancer recorded in 2018. During 2018, the incidence of new cases rose to 1,412,732. Looking forward, because of the region's aging population and changes in lifestyle, the incidence will increase significantly in coming years.

Worldwide, almost 70% of cancer deaths occur in countries ranking as medium or low on the Human Development Index (HDI). Poverty, including less access to education and health care, exposes residents to greater risk of developing and dying from cancer. According to WHO, in low-income countries less than 30% of patients diagnosed with cancer have access to treatment; in high-income countries, more than 90% of patients diagnosed with cancer have access to treatment.

The immediate demands of the COVID-19 pandemic have required health systems to focus on containment strategies to minimize mortality. Our collective regional prioritization of COVID-19 and implementation of physical distancing as an intervention strategy has impaired cancer health providers' functioning specifically by postponing cancer screening, in-person consultations, and control tests, as well as limiting treatments that might result in significant risk of infectious complications or require critical care.

The impact of public health measures to contain the pandemic are interwoven with the economic crisis, producing an increase in poverty and challenges for patients to access cancer screening and treatment from clinicians in a timely manner.

The pre-pandemic public health situation across Latin America, which typically included fragmented health systems, weak social protection for disadvantaged people, and significant percentages of the population living in poverty, will result in this pandemic probably having a greater impact on cancer control in our region than it will have in countries with better public health services and preparation.

Concerned about this situation, a group of Latin American experts on cancer, under the leadership of Dr. Tabaré Vázquez, and based on experience from Uruguay (*Document “Proposals for a National Strategic Plan in response to the impact of the COVID-19 pandemic. Uruguay, May 6, 2020”*), decided in May 2020 to carry out a project with the aim to evaluate the impact of the pandemic on cancer control in the region. Data about the state of cancer control, previous to and during the pandemic, were collected from nine countries in the Latin American region. Concrete proposals were detailed to urgently re-establish the public policies for cancer control and the implementation of cancer prevention interventions post-pandemic.

The project’s strategy consisted of convening health leaders from Argentina, Brazil, Chile, Colombia, Honduras, Mexico, Nicaragua, Peru and Uruguay to operationalize country-specific technical teams that would address clinical, economic, health system, and public policy issues of cancer in what would become this Position Paper.

This Position Paper serves as an urgent call to governments, and civil society as a whole, to propose, approve and implement appropriate, evidence-based and cost-effective measures to face the challenges posed by the post-pandemic scenario regarding cancer.

Focusing first on early detection of cancer, we compared 2019 and 2020 data from our nine countries for March 16 to June 30, 2020 and found a significant reduction in the number of early detection tests for cancer. **If the significant decrease in screening tests continues as a trend, there will be a corresponding decrease in recorded cases of cancer, but only in the short term. Later, there will be an increase in cancer cases, which will unfortunately include detection of more advanced stage cancers, with consequent health and economic impacts.**

Likewise, a somewhat smaller decrease in the 2019 to 2020 comparison was documented in the number of first-time visits to oncology services and a corresponding reduction in pathology, surgery, and chemotherapy for patients with cancer.

If this situation becomes a trend, the health and economic impact will be compounded in the post-pandemic period, with an **overload of demand on health services to ensure diagnostic tests and consequent treatments. This will, in turn, negatively impact the level of resources available for cancer control.**

Cancer mortality will increase, both in the short and medium-term, resulting from less control of risk factors, delays in prevention screening tests, less access to cancer diagnoses and treatments, and an increase in poverty generated by the pandemic.

Direct expenses associated with cancer control, which are those incurred within the health system, **will increase in the medium-term, primarily due to late-stage diagnoses, which are associated with higher costs of care.**

To reduce the negative impact of COVID-19 on cancer control at the regional level and avoid generating an uncontrollable situation in the coming years in public health, we propose:

- ✓ Guaranteeing access to oncology services, including support for patient transportation, elimination of economic barriers (out-of-pocket payments), and the use of communication technologies for remote patient assessment and monitoring.
- ✓ Developing communication and education programs that appropriately guide cancer patients to understand the risk of infection by Sars-Cov-2 versus the risk of inappropriate control of their disease such as missing treatments for fear of the virus.
- ✓ Developing measures that reduce the pandemic's impact on conditions related to poverty, including strategies for reducing the economic impact of cancer on patients through establishment of ongoing dialogue between the health sector and other sectors of the economy. The desired result is balanced measures protective of health and life, as well as protective of the economic infrastructure.
- ✓ Enabling various levels of care and non-specialized professionals to be involved in oncology and the care of cancer patients, through the appropriate use of communication tools, the constitution of care networks, and structuring of clinical referrals with different levels of responsibility.
- ✓ Generating normative operational and economic frameworks that enable and facilitate the implementation of telemedicine.
- ✓ Developing strategic operational plans for phased reintroduction of activities for early detection of cancer with the aim of reducing the risk of late diagnoses without overwhelming the capacity of oncology services
- ✓ Adapting clinical practice guidelines for the management of cancer patients according to local pandemic situations, best available evidence, and with adjustments made to accommodate the level of resources and characteristics of the health system.

- ✓ Maintaining, or resuming as soon as possible, measures for control of risk factors, particularly tobacco use, the harmful consumption of alcohol, obesity, sedentary lifestyles, and vaccination against HPV and Hepatitis B.
- ✓ Fast-tracking regional registry systems to assess the impact of the pandemic on cancer care.
- ✓ Promoting the development of research on the intersection of COVID-19 and cancer, including its impact on patients, oncology services, and health personnel.
- ✓ Promoting regional collaboration and the exchange of learning among government, academic, and health care institutions.

Although the proposed actions should be implemented immediately in response to the pandemic, we consider that they should take place within the framework of the progressive strengthening of health systems, which includes actions such as:

- ✓ Ensuring the necessary infrastructure for the prevention, early detection, and treatment of cancer
- ✓ Guaranteeing access to and coverage of essential cancer-related services
- ✓ Empowering patients, their families, and civil society groups to advance cancer prevention, diagnosis, treatment, and rehabilitation.
- ✓ Developing, promoting and implementing National Cancer Control Programs in the face of the new public health realities; defining financing mechanisms, which will protect cancer care in the face of new priorities in public health; and developing flexible operational tools in preparation for inevitable and increasing health threats.
- ✓ Strengthening the implementation of population-based cancer registries using publicly available information to enable real-time planning, monitoring, and evaluation of Cancer Control Plans and agile adjustment and deployment of cancer prevention and control policies.
- ✓ Developing evidence-based clinical practice guidelines stratified according to available resources (human, diagnostic, and therapeutic) to ensure rational use of resources and achieve the best possible care.
- ✓ Developing administrative databases to understand aggregated expenses associated with cancer care, by disease stage and site, to promote more efficient use of resources.
- ✓ Promoting well-trained teams of biostatisticians and health economists for evaluating the quality of the data collected and useful analysis.
- ✓ Supporting innovation and the development of translational academic research.
- ✓ Following WHO's recommendation, creating, in each country, an integrated health system that improves the current inequitable segmentation and fragmentation of health systems in many countries of the region. Additional priorities are universal

access to, and health coverage in health systems that abide by the Social Security principles and UN and ILO guidelines.

The coronavirus pandemic provides an opportunity for society to act in solidarity and find in this crisis the impetus to achieve the Sustainable Development Goals: Goal 3/Health and Well-Being, Goal 10/Reducing Inequalities, and Goal 17/Developing Alliances to accomplish the proposed objectives.

This document will be distributed to the highest Governmental, Health, and Civil Society Authorities, both International and Regional, and in each country.

Aguascalientes, Buenos Aires, Bogotá, Brasilia, Ecatepec, Guatemala, Lima, Managua, Ciudad de México, Montevideo, Rio de Janeiro, Santiago de Chile, San Pedro Sula, Tapachula, Tegucigalpa, Tuxtla Gutiérrez, September 30, 2020.

Tabaré Vázquez Rosas, MD- Montevideo, Uruguay.

MD, Specialist in Radiation and Medical Oncology. Professor of Radiation Oncology, University of Uruguay. President of Uruguay from 2005 to 2010 and from 2015 to 2020.

Eduardo Cazap - Buenos Aires, Argentina.

MD, PhD, FASCO. Specialist in Medical Oncology. President of the Sociedad Latinoamericana y del Caribe de Oncología Médica (SLACOM). Past- President of the Union for International Cancer Control (UICC).

Lucía Delgado- Montevideo, Uruguay.

MD, Specialist in Medical Oncology, Professor of Clinical Oncology, University of Uruguay, Past-President of the Latin American Federation of Cancer Societies (FLASCA). Past-Director of the National Cancer Control Program, Ministry of Health.

Julia Ismael- Buenos Aires, Argentina.

MD. Specialist in Internal Medicine and Medical Oncology. (UBA), Past- Director of the National Cancer Institute, Argentina.

Suyapa Bejarano- San Pedro Sula. Honduras.

MD, Specialist in Medical Oncology, PhD Candidate in Public Health, Liga Contra el Cáncer - Honduras.

Carlos Castro- Bogotá, Colombia.

MD, Specialist in Medical Oncology, Past-Vice Minister of Health, Past Director of the National Cancer Institute-Colombia, Scientific Director of the Liga Colombiana Contra el Cáncer.

Hugo Castro- Guatemala, Guatemala.

MD, Specialist in Medical Oncology. Specialist in Internal Medicine.

Bettina Müller- Santiago de Chile, Chile.

MD, Specialist in Medical Oncology. National Coordinator of the Latin America Cancer Research Network, Co-founder and Past President of the Chilean Society for Medical Oncology, Instituto Nacional del Cáncer.

Francisco Gutiérrez-Delgado. – Tuxtla Gutiérrez, Chiapas, México.

MD, PhD, FACP. Specialist in Medical Oncology, Director of the Centro de Estudios y Prevención del Cáncer (CEPREC). Tuxtla Gutiérrez, Chiapas, México. CEO of the Latin American School of Oncology (ELO).

Luiz Antonio Santini- Rio de Janeiro, Brazil.

MD, Researcher Fundação Oswaldo Cruz (FIOCRUZ /RJ), Past-Director of the National Cancer Institute-Brazil (2005-2015)

Carlos Vallejos Sologuren- Lima, Perú.

MD, Specialist in Medical Oncology, Founding Director Oncosalud-AUNA. Past- Minister of Health, Past-Director of the Instituto Nacional de Enfermedades Neoplásicas (INEN).

Mónica Ventriglia –Buenos Aires, Argentina.

MD, Specialist in Medical Oncology, Director of PREAIDEO, Asistencia Integral al Enfermo Oncológico. . Clinical Consultant of the Sociedad Latinoamericana y del Caribe de Oncología Médica (SLACOM).

María Celeste Díaz- Buenos Aires, Argentina.

MD, Specialist in Medical Oncology (UBA). M.Sc Candidate in Health Economics. Former Coordinator for STDs at National Cancer Institute-Argentina. Technical Consultant for Secretariat of Medication and Strategic Information- Ministry of Health.

José Gomes Temporão- Río de Janeiro, Brasil.

MD, Researcher FIOCRUZ/RJ, Past-Minister of Health (2007 to 2010).

Sandro J. Martins- Brasilia, Brasil.

MD, Specialist in Medical Oncology, Investigator FIOCRUZ/DF Hospital Universitário de Brasília-DF – EBSEH

Mario Roberto Dal Poz- Rio de Janeiro, Brasil.

MD, Professor Institute of Social Medicine- University of Estado do Rio de Janeiro (UERJ), WHO's Past-Coordinator of the Human Resources in Health (2002 a 2012).

Walter Zoss - Rio de Janeiro , Brasil.

Journalist. Technical Consultant - FIOCRUZ/RJ, CEO - RINC-SLACOM.

Alessandra de Sá Earp Siqueira - Rio de Janeiro, Brasil.

MD, Physician at National Cancer Institute-Brazil and Federal University of Rio de Janeiro, Specialist in Project Planning and Management and Health Economics - Fundação Getúlio Vargas.

Tania Alfaro Morgado - Santiago, Chile.

MD, Master in Public Health, Professor, Public Health School, University of Chile.

Oswaldo Artaza Barrios – Santiago, Chile.

MD, Pediatric Cardiologist, Past-Health Minister, Past WHO-PAHO Consultant, Dean Faculty of Health Sciences, University of the Americas.

Roberto Estay Miquel-Santiago, Chile.

MD, Specialist in Medical Oncologist and Internal Medicine, Master in Public Health, President of the Health Policies and Studies of the Medical College at Hospital Salvador.

Rafael Urriola - Santiago, Chile.

Health Economist, Master in Public Economics and Planning (Universidad Paris X, Nanterre, Francia). Past-President. Asociación Economía de la Salud- Chile, Coordinator Revista Economía de la Salud- Chile.

Wilson Cubides Martinez- Bogotá, Colombia.

MD, Master in Health Administration and International Public Health.

Raul Murillo- Bogotá, Colombia.

MD, Master in Public Health. Director of the Centro Javeriano de Oncología - Hospital Universitario San Ignacio, Pontificia Universidad Javeriana.

Alejandra Zavala- Tegucigalpa, Honduras.

MD, Specialist in Medical Oncologist, Hospital General San Felipe.

Lourdes Salazar- Guatemala, Guatemala.

MD, Internist. Specialist in Evaluation of Physical Disability.

Christian Murray, M.Sc- . Guatemala, Guatemala.

Specialist in Health Economics. Master in Health Economics and Politics. Regional Coordinator of Health Economics of the Centro de Estudios en Salud de la Universidad Del Valle de Guatemala.

Julio César Zúniga- San Pedro Sula, Honduras.

M.P.H. Candidate. University of Michigan

Karla Zepeda- Tegucigalpa, Honduras.

MD, Master in Public Health. Hospital Escuela Tegucigalpa

Maria de los Angeles Mendoza- Tegucigalpa, Honduras.

MD, Fundación Hondureña para el Niño con cáncer

Pedro Estrada- San Pedro Sula, Honduras.

MD, Specialist in Medical Oncology. Hospital Mario Catarino Rivas San Pedro Sula

Rolando Medina Barahona- San Pedro Sula, Honduras.

MD, Especialista en Oncología Médica. Instituto Hondureño de Seguridad Social Regional San Pedro Sula.

Jean René Clemenceau- Ciudad de México DF, México.

MD, Specialist in Oncology. Hospital Angeles Pedregal. Ciudad de México, México. President of the Latin American School of Oncology (ELO)

Marisol Torres Toledano- Ecatepec, Estado de México, México.

MD, Internist, Master in Health Services Management. PhD Candidate in Health Economics. Hospital General de Zona con Unidad de Medicina Familiar No 76. México Oriente IMSS.

Jorge Pérez Romero- Ciudad de México, México.

Master in Public Health. Latin American School of Oncology (ELO).

Omar Gómez Cruz- Tapachula, Chiapas, México.

MD, Surgical Oncologist. President of Fundación Salud y Bienestar Mesoamérica (FUNSALBARME). Tapachula, Chiapas, México.

Efren Flores Alvarez- Aguascalientes, México.

MD, Surgical Oncologist. Centenario Hospital Hidalgo.

Adalberto Flores Coutiño - Tapachula, Chiapas, México.

MD, Gynecologist Oncologist. Centro Estatal de Cancerología.

René Estrada- Tapachula, Chiapas, México.

Master in Epidemiology. Fundación Salud y Bienestar Mesoamérica (FUNSALBARME).

Teresa Apresa- Ciudad de México, México.

Specialist in Public Health. Hospital de Oncología. Centro Médico Nacional SXXI, IMSS.

Adriana González Delgado- Ciudad de México, México.

MD, PhD in Collective Health, Universidad de la Salud.

Alfredo Aguilar Cartagena- Lima, Perú.

MD, Medical Oncologist. Master in Public Health. Director Revista Carcinomas. Scientific and Academic Director AUNA Perú.

Manuel Villaran Iturri - Lima, Perú.

Medical Project Manager Gerente de Proyectos Médicos AUNA Perú

Dra Elena Tapia-López- Lima, Perú.

MD, Master in Science Candidate. Head of Health Technology and Health Economics AUNA Perú.

Rodolfo Vázquez – Montevideo, Uruguay.

MD, Health Services Administration Specialist. Professor in Preventive and Social Medicine. University of Uruguay.

Alvaro Luongo – Montevideo, Uruguay.

MD, Radiation and Medical Oncologist. Professor of Radiation Oncology, University of Uruguay. Past-Director of the National Cancer Institute-Uruguay. Past- President Honorary Commission for the Fight Against Cancer.

Miguel Fernández Galeano - Montevideo, Uruguay.

MD, Specialist in Health Services Administration. Past- Vice Minister of Health.

Ida Oreggioni - Montevideo, Uruguay.

Economist, Health Economics Specialist, Past – Director of the Health Economics Area of the Ministry of Health.

Acknowledgements

*To **Linda S. Kennedy**, Associate Director for Strategic Initiatives & Global Oncology at Norris Cotton Cancer Center Dartmouth-Hitchcock, for her editorial assistance.*

*To **Ivan Martinez Clemente**, Information and Communications Technology of the Latin American School of Oncology (ELO) (Tuxtla Gutiérrez, Chiapas) for his technical assistance.*