COVID-19 in the Americas: the role of collaborating centers in understanding lessons and best practices in pandemic preparedness and response

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ABSTRACT
COVID-19 exposed major gaps in global, regional, state, and local responses to public health emergencies. In preparation for the WHA Special Session to consider the benefits of developing an international instrument on pandemic preparedness, the O’Neill Institute in partnership with Foundation for the National Institutes of Health convened 30 of the world’s leading authorities on global health law, financing, biomedical science, implementation, and emergency response along with leaders from prominent international organizations. This meeting was followed by regional consultations convened in Latin America-Caribbean, Africa, and Southeast Asia. These high-level expert consultations generated in-depth discussions on weaknesses and persisting gaps in global pandemic preparedness and what a new international agreement might include to address them. Regional intergovernmental organizations like PAHO can work closely with related multilateral development banks to develop financial instruments that can smooth systemic economic disruption; and regional centers of research and manufacturing excellence can offer a strong front line for producing medicines and vaccines rapidly during a pandemic. With our research focused on the regional response to COVID-19 we are able to look at country responses individually and collectively to see how Latin America – Caribbean countries can capitalize and leverage their regional connections to strengthen their pandemic preparedness and response. By identifying existing gaps and examining the responses and approaches taken by PAHO, we can better understand the role of international and regional organizations and their collaborating centers in preparing and responding to pandemics.

Keywords
Disaster preparedness; COVID 19; international health regulations; legal epidemiology; Americas.

The COVID-19 pandemic has exposed critical gaps in local, national, regional, and international public health preparedness and response mechanisms, which continues to hinder both global and domestic responses to the spread of the SARS-CoV-2 virus. Governments and regional organizations used innovative approaches to fill these gaps and played essential roles in coordination and support. The Pan American Health Organization (PAHO) has exemplified these roles, and this paper examines both the solutions provided by PAHO during the pandemic, and the important role for the organization in building sustainable and resilient global health systems in the future.

The Center for Transformational Health Law at the O’Neill Institute for National and Global Health Law has been uniquely placed during the course of the COVID-19 pandemic to both witness and analyze the actions taken by PAHO during the past two years, and to understand both the gaps that existed in regional preparedness and the role played by PAHO. The O’Neill Institute has a long history of concretely supporting PAHO’s work prior to COVID-19, including through...
developing regulatory frameworks for food and drug law in the Americas, strengthening the legal environment for the elimination of falsified and substandard medicines, and measuring state compliance with health rights obligations to promote public health. This paper, based on the work done by the Institute in its capacity as a WHO Collaborating Center, will argue that regional bodies can and should play critical roles in supporting outbreak preparedness and response and that the kind of policy surveillance work, innovative research, and collaborative global convenings conducted by the Institute and other centers can and should inform PAHO’s policy priorities, and support their implementation and evaluation.

O’NEILL INSTITUTE

The Center for Transformational Health Law (the Center), housed at the Georgetown University Law Center has been heavily involved in supporting the World Health Assembly in the creation of an international legal instrument for pandemic outbreaks. The O’Neill Institute is the only designated WHO Collaborating Center for National and Global Health Law in the world. In this role, O’Neill is responsible for delivering technical support for implementing the WHO and PAHO’s mandated work and program objectives and strengthening capacity in the United States. We share a common interest in using the law to improve the health of people around the world, and in this role, we seek to assist the WHO and PAHO, to advance the achievement of our common goals (1).

On May 25, 2021, the World Health Assembly (WHA) of the World Health Organization (WHO) called for a Special Session to be convened in late November 2021 to consider developing a convention, agreement, or other international instrument on pandemic preparedness and response.2 The O’Neill Institute and FNIH (The Foundation for the National Institutes of Health) convened 30 of the world’s leading authorities on global health law, financing, biomedical science, implementation, and emergency response along with leaders from prominent international organizations involved in defeating the pandemic. The high-level experts had in-depth discussions on the weaknesses and persisting gaps in global pandemic preparedness and what a new international agreement might include to address them. This meeting was followed by regional consultations which focused on the unique challenges faced by the countries in the region, and on the present and future roles of regional governance mechanisms in managing and responding to novel disease outbreaks (2). The consultations in the Latin American and Caribbean regions were particularly important, as these regions were among those most impacted by the spread of COVID-19. These consultations were unique as well, given the well-established and unique role that PAHO has played in the region. The discussions were fruitful, given the geographic, cultural, and economic diversity of the region.

GAPS IN CURRENT RESPONSE AND PREPAREDNESS MECHANISMS

The development and content of an international legal instrument for pandemic preparedness and response has been the object of much study and discussion by the O’Neill Institute. While the challenges and merits of a potential international instrument have been discussed at length in other publications, the implications of any instrument on existing and ongoing efforts at the regional level must not be dismissed. This paper seeks to highlight the role that PAHO has played at the regional level, in hopes of promoting constructive dialogue about the role of World Health Organization Regional offices and regional legal bodies in preparedness and response to ensure coherence and cooperation between international and regional mechanisms and responses. It is possible that there are specific regional needs, or components of pandemic preparedness, prevention, and response that an international agreement may not be well-suited to confront. Supporting the diversity of effective regional and local responses will require sophisticated framing of any global instrument, and should be a priority for those drafting these multilateral agreements or treaties.

A number of the gaps identified in Latin America that this paper seeks to highlight should inform not only the ongoing work of PAHO, but the architecture of any forthcoming international instrument, to ensure that countries are best positioned to adopt new frameworks, implement new legislation, and comply with new international obligations. Collaborating centers, like the O’Neill Institute can help to bring these gaps to the forefront of policy discussions, and to assist in the creation of effective strategies to fill these gaps.

1. Gaps in Technical Capacity at the Country Level

The high-level experts identified a lack of technical capacity at the national level as a serious impediment to the effective implementation of policies (3). Challenges in training experts at the local level in a variety of areas including data collection and disease surveillance was highlighted by experts as a persistent gap. This gap exists not only at the university level, but at the professional training level and requires a comprehensive long-term strategy to promote capacity-building in a range of areas (3).

PAHO, could consider expanding some of their successful capacity building efforts. In the first months of the pandemic alone, PAHO reached upwards of a thousand healthcare professionals through more than 50 webinars to help them respond to the crisis (4). In addition to these virtual events, PAHO has worked directly within countries, in Haiti for example, PAHO trained 2,700 community health workers to support scaling up of laboratory diagnosis capabilities (5). These kinds of essential capacity-building activities must be expanded in the long-term to build resilient and sustainable professional capabilities across the Americas. Testing capacity is another area where, while not the focus of the expert group, PAHO played a key role, and recognized a need to be involved moving forward. For example, using its Strategic Fund to improve access to essential medicines and strategic public health supplies, PAHO procured 10 million PCR tests at the beginning of the pandemic, and has since raised that number to 42 million COVID-19 tests throughout the last 2 years (6). Recognizing a need for more sustainable and strategic investment in building testing capabilities in the region, PAHO is now leading a network of laboratories to increase the region’s ability to detect and respond to future variants of COVID-19, and to other diseases (6).

In addition to technical medical and health system capacity, regional consultations highlighted a serious gap in communications capacity both within PAHO and in national governments (3). At the country level, communications strategies were often ineffective in translating complex and rapidly changing scientific
evidence about the virus (7). Governments in the region have been faced with a difficult balancing act between communicating uncertainty and sharing clear, reliable and transparent information to curb the spread of the virus” (8). Disinformation about the virus spread throughout the region impacting the ability of governments to reach large segments of the population with critically important information (9). This issue, while not unique to Latin America or the Caribbean, undermined a number of important interventions by both PAHO and national governments. One issue identified was “an initial hesitancy by governments to communicate decisively, even about the uncertainty and unknowns surrounding the pandemic” which “has left space for misinformation to proliferate as people searched for answers. Instead, being clear about uncertainty is important to convey scientific advice that is subject to change with emerging evidence” (10). This troubling situation was compounded in many contexts by “gaps in the public’s background health knowledge that should alert public health officials to the ongoing need for effective communication of needed information long before a crisis” (11). Although PAHO published several toolkits for communicating about COVID-19 in the early stages of the pandemic (12,13), experts suggested that countries needed additional support in this area. A sustained investment in building public health communications capacity would go a long way in advancing the ability of countries to respond effectively to future outbreaks. This could include strengthening networks between WHO, PAHO, WHO Country Offices, and country governments to facilitate reliable, accurate, and timely communications across the region during emergencies.

2. Gaps in Information Technology Infrastructure

Discussions about a possible international pandemic instrument have included conversations about the role of data sharing and surveillance. High-level experts consulted by the Institute highlighted a lack of information technology (IT) and digital capabilities as fundamental challenges that impeded data sharing and surveillance during the COVID-19 pandemic. In many areas across the Latin American and Caribbean region, medical records and hospital procedures are still conducted using a pen and paper system, and many hospitals and health authorities do not have the infrastructure to support a digital system (3). Likewise, a lack of centralized information, and/or a coherent means of recording and sharing clinical symptoms and lab results may lead to less compliance with information sharing protocols, or paper information getting lost or discarded within the system (3). Experts identified improving IT infrastructure as a crucial cross-sectoral priority that must be accomplished at the regional level. This may involve working at the national level with Ministries of Innovation/IT, healthcare systems, and PAHO to help develop IT infrastructure in remote areas, and build efficient, centralized systems for information gathering, storage and sharing (3). Investing in IT will be crucial for managing COVID-19 and responding to future pandemics, and PAHO is uniquely placed to work with national ministries to develop policies and best practices, and facilitate the strengthening of IT infrastructure in the region.

3. Gaps in Coordination

In addition to the challenges associated with limited technical capacity, and insufficient technology infrastructure during the pandemic, the high level experts consulted also identified issues with coordination (3). These challenges included those faced in facilitating coordination between countries and the WHO head offices in Geneva, those identified by PAHO officials in coordinating with other WHO regional offices, and those between PAHO and other multilateral organizations (3).

Both global and regional intergovernmental organizations play a role in preparedness and response. Global bodies are able to set standards and provide policy guidelines, whereas regional bodies, like PAHO and the Africa Centers for Disease Control and Prevention are able to work more closely with countries for implementation of the policy guidance. PAHO was identified as a key player in facilitating relationships between WHO and countries (3).

Coordination between PAHO and other regional offices was identified as challenging at times given the historical evolution of PAHO, and its large and sophisticated structure. High-level experts, including those who work with PAHO, found there to be gaps in personnel at other regional offices. This meant that PAHO officials often had no counterpart in a similar or equivalent role in other regional offices with whom they could coordinate, discuss, or share concerns or experiences. These structural differences should be considered and addressed by the WHO to ensure that regional offices are able to effectively coordinate across regions and with headquarters in Geneva.

THE ROLE OF PAHO IN ADDRESSING THESE GAPS

PAHO has played a number of important roles throughout the COVID-19 pandemic, yet this paper will discuss broadly two areas in which the O’Neill Institute has seen the most innovative and widespread contributions by the organization to efforts to bring the COVID-19 pandemic under control and mitigate the impacts of the virus on the lives of those living in the Americas.

The first area is standard-setting, which saw PAHO’s direct influence on developing and changing national-level policies, promoting evidence-based best practices, and providing direct technical support to governments.

The second area is vaccine access, which saw the Latin America-Caribbean region and PAHO working in close partnership with the Inter-American Development Bank as well as COVAX as part of a broader strategy toward vaccine access.

These two areas that will be discussed provide examples of fruitful regional collaboration and solutions to multinational problems. These areas show that regional institutions are irreplaceable, and act as mediators between organizations and individuals living and working in the realities on the ground, and international organizations dictating priorities and policies. These collaborations also show the important role of regional organizations in helping countries to adopt guidelines and standards that are in line with internationally recognized best practices, while tailoring them to the individual country’s needs.

STANDARD-SETTING

The Latin America and Caribbean consultations featured important discussions about the relationships between PAHO and the WHO head office in Geneva, and PAHO and
governments in the region. The close working relationship between PAHO and national governments in Latin America and the Caribbean was highlighted by participants as an important factor in PAHO’s ability to positively influence policy, and provide direct support to countries in the areas where they need it most. This work included the establishment of in-country management teams to accompany governments and provide immediate feedback and technical assistance to in-country public health authorities (14).

Likewise, PAHO’s work aimed to facilitate the creation of national preparation and response plans for COVID-19 (14). As of May 2020, 32 of the 35 countries in the PAHO region created their national plans with the help or guidance of PAHO personnel (14). In addition to simply guiding health policy, PAHO worked to connect governments with other organizations that could promote a holistic and intersectional approach to handling the COVID-19 pandemic, to promote policies that addressed all areas of life impacted by the pandemic. The standard-setting role of PAHO during this crisis was not only a top-down strategy whereby PAHO issued guidance and governments complied; PAHO also facilitated inter-country collaboration, technical assistance, and sharing of knowledge and expertise by connecting governments and facilitating horizontal learning opportunities between member states (14).

While PAHO undoubtedly works behind the scenes with governments and pushes for policy in ways that may not be public, there are a range of examples available publicly that demonstrate the standard-setting activities carried out at the regional level, and the trickle-down effect that has occurred, resulting in concrete changes in policy. Promoting best practices throughout the region has aided not only in the development of good policy but has directly contributed to saving lives. In Dominica, “El apoyo de la OPS en los últimos dos años ha sido invaluable. Dominica ha podido luchar contra la COVID-19, limitar las muertes y reducir el impacto del virus.” (The support of PAHO in the last two years has been invaluable. Dominica has been able to fight against COVID-19, limit deaths, and reduce the impact of the virus.) (15).

An active role by PAHO in facilitating standard setting allows a more suitable response to regional and global emergencies, considering cross-border travel, procurement of medical equipment and personnel, and regional surveillance. This active role means that countries are not making decisions in isolation, or with and can rely on guidance from PAHO about what is working for other countries in the region. Additionally, PAHO is able to continuously track and assess response, helping to shift and divert resources where they are needed.

REGIONAL EFFORTS TO INCREASE VACCINE ACCESS

In the early stages of the vaccine rollout, a number of LMICs (Low and Middle Income Countries), including those in the Americas were struggling not only to secure portions of the limited supplies of vaccines for the populations, but also to negotiate with manufacturers the contracts and accompanying legal guarantees. PAHO was not the only regional player that stepped in (18), and was also accompanied by the Inter American Development Bank (18). In addition to committing upwards of one billion dollars in vaccine financing the IDB has stepped in to fill a policy void that created a serious impediment to an effective vaccine procurement strategy for a number of countries in the region.

Given the newness of the vaccines, and the unknown possible future impacts, governments and pharmaceutical companies were reluctant to assume the legal liability for adverse outcomes stemming from these products (19). A number of high-level experts convened by the Institute also found that many governments also lacked the capacity to navigate complex contract negotiations with powerful private sector actors. At the Inter-american level, the IDB (Inter-American Development Bank) created an instrument to help both countries and vaccine makers in negotiating and resolving indemnity obligations (19). This instrument was able to help remove a key obstacle in vaccine contract negotiations resulting in streamlining and speeding up negotiations. In addition to addressing issues of indemnity, the IDB initiative also sought to help create and launch regulatory reforms to increase vaccine procurement, access, and distribution (19). The IDB was the first multilateral development bank to create an initiative to serve these goals, and to provide an effective instrument to its clients (19). What the IDB has done is to “identify the financial barriers to create an innovative financial instrument to help the region. It is the first guarantee instrument of its kind ever created, guaranteeing terms and conditions, as well as contingencies and liabilities for countries and pharmaceutical companies” (3). PAHO collaborated with the IDB at the country level, for example in Belize (19), on additional projects to enhance vaccine access throughout the region, and to mitigate the economic and social fallout caused by the virus (21).

These kinds of innovative and dynamic responses to challenges identified by nations in the region are critical for ensuring effective pandemic responses. These responses must be followed and evaluated over time in consultation with both the regional bodies implementing them, and the governments they are designed to benefit to determine their impacts. Collaborating centers, like the Institute can assist in fulfilling these essential surveillance and evaluation functions. Not only does the Institute have ample access to academic resources and expertise in law and policy surveillance, its expertise is also complemented by involvement with other international bodies. Recently, the Institute conducted the first comprehensive analysis of vaccine development agreements entered into by CEPI (Coalition for Epidemic Preparedness and Innovations). This analysis was accompanied by qualitative interviews with key actors and stakeholders to determine the degree to which equitable access commitments have been met. These exercises are just small examples of the important work being done at collaborating centers, and highlight the role of collaborating centers as critical resources not only in support of PAHO, but also in support of the important work being done by those organizations that support PAHO’s mission.
CONCLUSIONS

The COVID-19 pandemic has exposed serious gaps in the international and multilateral systems that were relied on for decades to coordinate global responses to crises. In many ways, the exposure of these gaps has been a troubling wake-up call that our current frameworks, when tested, proved woefully inadequate. This wake-up call, while it must lead to meaningful change at the international level, should not overshadow the important work that happened at the regional level, and what we can learn from regional level responses to COVID-19. PAHO’s tireless commitment to fulfilling its mission and attempting to mitigate the impacts of the pandemic in the region presents several learning opportunities.

Collaborating Centers play important functions in helping PAHO to both understand and recognize challenges in achieving their mission, and in helping them to find strategies to combat these difficulties, but these roles could be expanded as assessments of regional needs and responses become even more important in the context of the development of an international legal instrument for pandemic preparedness and response. During the COVID-19, the O’Neill Institute has supported PAHO by developing resource materials on strengthening health systems, providing technical advice on Pandemic Legal Preparedness, and developing a framework for health governance in the Americas. From capacity-building initiatives, to convening experts, to conducting studies that evaluate the efficacy of policy interventions, Collaborating Centers like the O’Neill Institute can and should continue to highlight and support PAHO’s important work. By harnessing Collaborating Center expertise and resources, and working together to highlight both the successes and outstanding challenges at PAHO, we hope to move progressively towards the improvement and protection of the health of all those living in the American region.

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REFERENCES


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COVID-19 en la Región de las Américas: papel de los centros colaboradores en la comprensión de las enseñanzas y mejores prácticas en la preparación y respuesta frente a pandemias

RESUMEN

La COVID-19 expuso grandes brechas en las respuestas locales, nacionales, regionales y mundiales a las emergencias de salud pública. En preparación para la reunión extraordinaria de la Asamblea Mundial de la Salud para considerar los beneficios de elaborar un instrumento internacional sobre la preparación frente a las pandemias, el Instituto O’Neill, en colaboración con la Fundación para los Institutos Nacionales de Salud, convocó a 30 de las principales autoridades mundiales en materia de derecho, financiamiento, ciencia biomédica, implementación y respuesta a emergencias de salud, así como a líderes de organizaciones internacionales prominentes. A esta reunión le siguieron consultas regionales convocadas en América Latina y el Caribe, África y el sudeste asiático. Estas consultas con expertos de alto nivel generaron debates en profundidad acerca de las debilidades y brechas persistentes en la preparación frente a las pandemias y qué podría incluirse en un nuevo acuerdo internacional sobre cómo abordarlas. Las organizaciones intergubernamentales regionales como la Organización Panamericana de la Salud pueden trabajar en estrecha colaboración con los bancos multilaterales de desarrollo relacionados para elaborar instrumentos financieros que puedan aliviar las perturbaciones económicas sistémicas; y los centros regionales de excelencia en investigación y producción pueden formar una sólida primera línea de acción para producir medicamentos y vacunas rápidamente durante una pandemia. Con esta investigación centrada en la respuesta regional a la COVID-19, podemos analizar las respuestas de los países de forma individual y colectiva para observar la manera en que América Latina y el Caribe pueden capitalizar y aprovechar sus conexiones regionales para fortalecer su preparación y respuesta frente a una pandemia. Al determinar cuáles son las brechas existentes y examinar las respuestas y los enfoques adoptados por la OPS, podemos comprender mejor el papel de las organizaciones regionales e internacionales y sus centros colaboradores en la preparación y respuesta frente a las pandemias.

Palabras clave
Preparación ante desastres; COVID-19; reglamento sanitario internacional; epidemiología del derecho; Américas.
COVID-19 nas Américas: o papel dos centros colaboradores para entender as lições e melhores práticas de preparação e resposta a pandemias

RESUMO
A COVID-19 expôs grandes lacunas nas respostas globais, regionais, estaduais e locais a emergências de saúde pública. Nos preparativos para a Sessão Especial da Assembleia Mundial da Saúde para avaliar os benefícios de desenvolver um instrumento internacional de preparação para pandemias, o Instituto O’Neill, em parceria com a Fundação para os Institutos Nacionais de Saúde, reuniu 30 das principais autoridades mundiais em direito sanitário global, financiamento, ciências biomédicas, implementação e resposta a emergências, além de líderes de organizações internacionais proeminentes. Essa reunião foi seguida por consultas regionais convocadas na América Latina/Caribe, na África e no sudeste da Ásia. Essas consultas com especialistas de alto nível geraram discussões minuciosas sobre os pontos fracos e as lacunas persistentes na preparação global para pandemias e o que poderia ser incluído em um novo acordo internacional para resolvê-los. Organizações intergovernamentais regionais, como a OPAS, podem trabalhar em estreita colaboração com os bancos multilaterais de desenvolvimento para desenvolver instrumentos financeiros capazes de atenuar a ruptura econômica sistêmica; por outro lado, centros regionais de excelência em pesquisa e fabricação podem oferecer uma linha de frente expressiva para a rápida produção de medicamentos e vacinas durante uma pandemia. Usando os dados da nossa pesquisa sobre a resposta regional à COVID-19, podemos analisar as respostas dos países de forma individual e coletiva para avaliar como os países da América Latina e do Caribe podem capitalizar e alavancar suas conexões regionais para fortalecer sua preparação e resposta à pandemia. Ao identificar lacunas existentes e analisar as respostas e abordagens adotadas pela OPAS, podemos compreender melhor o papel das organizações internacionais e regionais e de seus centros colaboradores na preparação e resposta a pandemias.

Palavras-chave
Preparação em desastres; COVID-19; regulamento sanitário internacional; epidemiologia legal; América.