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Correspondence

SARS-CoV-2/COVID-19: Evolution in the Caribbean islands

Dear Editor

Shortly after the arrival of SARS-CoV-2/COVID-19 to Latin America [1], spread to other subregions occurred, e.g. Central America [2]. Nevertheless, there is lack of information about SARS-CoV-2/COVID-19 happening in the Caribbean countries, since there are only a few published studies, including case reports, letters to the editor, comments, reviews, among others [3–6]. While seven months after the beginning of the COVID-19 is still a preliminary time frame, we consider it is time to highlight the on-going importance of SARS-CoV-2/COVID-19 in this American region and the need to anticipate future challenges for an effective intervention for this developing region.

The Caribbean region is composed of a mosaic of cultures, populations and socioeconomic disparities which may translate into a non-homogeneous SARS-CoV-2/COVID-19 situation; hence, it is hard to make generalisations from one country to the next. Some of the factors observed in some countries that may characterise this region and affect an effective response to this pandemic include poverty, hygiene practices, crowding, lack of access to health-care and educational services, immigration and emigration, the absence of leadership and infection control standards [4–6].

This region is vulnerable to frequent natural hazards, including earthquakes, hurricane storms, drought and floods. The reduced investment in health and research and fragile public health systems in some countries from this region are a huge challenge. Caribbean countries also face continuing threats from other chronic disease conditions and infectious diseases, including infection due to the human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), malaria, dengue and other arboviruses, other acute respiratory and diarrhoeal diseases, and endemic neglected tropical diseases, including lymphatic filariasis, schistosomiasis, leptospirosis, enteric infections [3–6]. Otherwise, Caribbean countries are a common destination for international tourists. It has been estimated that tourism accounts for 14% of the region's gross domestic product (GDP), more than USD 28 billion annually [5,6] which make understandable that this pandemic situation should have social and economic impacts in addition to the effects on public health.

The outbreak has hit the Caribbean; as of March 1, 2020, in the Dominican Republic. Later, Cuba and Puerto Rico reported their first SARS-CoV-2/COVID-19 cases. A continuous reporting in the rest of the region, and the number grows each day; in some islands, mainly due to interstate transmission (Table 1) [4–6]. Various strategies are underway to tackle the rising number of cases. However, given the rapid spread of SARS-CoV-2/COVID-19 in the Caribbean, it now seems likely that more cases will occur in the entire region.

During May, Haiti experienced a dramatic increase in new cases, with 1000 people tested in a week, 70% of whom had positive results. Currently, they are targeting testing to patients with coexisting health

conditions or atypical clinical presentations, pregnant women, and health care workers [3–6].

Public health infrastructure, including disease surveillance, disease prevention, communication and financial support, are crucial for facing the threats posed by SARS-CoV-2/COVID-19. There is a severe challenge to the Caribbean national health systems because of the limited capacity of –and access to– ICU departments, as severe cases of COVID-19 may require oxygen therapy, conservative fluid management, breathing support and supporting other affected vital organs [3,6]. On the other hand, physicians engaged in diagnosing and treating this emerging infectious disease need to be well-trained and require standard protection from nosocomial transmission after their recurrent exposition.

In Haiti, for example, only a selected number of Haitians understand that the virus can infect anyone regardless of religious background or ethnicity; many people believe that the virus is the result of sin and it is God's punishment on humans for their sinful ways, while others believe that the world's elite manufactured the illness to kill minorities and annihilate those in developing countries [4,6]. Otherwise, there have been some rumours posted on social media, including that contaminated testing swabs transmit COVID-19 or that hospitals are using patients with COVID-19 for vaccine experiments.

Another example is in the Dominican Republic, where panic led people to storm pharmacies and buy stocks of drugs such as hydroxychloroquine; thus thousands of rheumatoid arthritis and systemic lupus erythematosus patients were unable to access their treatments which already exhausted [3,4], and has been shown that evidence on the benefits and harms of using hydroxychloroquine or chloroquine to treat COVID-19 is fragile and conflicting [1,6]. These two modest examples have shown that the perceptions of a phenomenon are playing a critical role in the control. It is mandatory to help people to obtain the necessary health and social services and access to appropriate support when needed.

There are more elements of concerns in the current stage of SARS-CoV-2/COVID-19 for the Caribbean. A call for a regional and global collaboration is a necessity, not a choice. A search for policies must exist to face a pandemic with a significant medical, economic, psychological and social impact.

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Table 1
Reported deaths from COVID-19 on July 31, 2020, in the Caribbean islands.

Caribbean islands ^a	Confirmed cases	Deaths	Case fatality rate (%)
British Virgin Islands	8	1	12.5
Sint Maarten	126	15	11.9
Montserrat	13	1	7.7
Barbados	110	7	6.4
Bermuda	156	9	5.8
Guadeloupe	244	14	5.7
Saint Martin	53	3	5.7
Martinique	269	15	5.6
Trinidad and Tobago	157	8	5.1
Curacao	29	1	3.4
Cuba	2597	87	3.4
Antigua and Barbuda	91	3	3.3
Aruba	119	3	2.5
Bahamas	484	11	2.3
Haiti	7378	159	2.2
United States Virgin Islands	398	8	2.0
Turks and Caicos Islands	104	2	1.9
Dominican Republic	67,915	1146	1.7
Puerto Rico	16,572	214	1.3
Jamaica	856	10	1.2
Cayman Islands	203	1	0.5
Anguilla	3	0	0.0
Dominica	18	0	0.0
Grenada	24	0	0.0
Saint Barthelemy	8	0	0.0
Saint Kitts and Nevis	17	0	0.0
Saint Lucia	25	0	0.0
Saint Vincent and Grenadines	52	0	0.0

^a Two island countries that are not bathed by the Caribbean Sea, but by the North Atlantic have been considered part of the Caribbean region: Bahamas and Turks and Caicos Islands.

Declaration of competing interest

We declare that we have no competing interests.

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