# **Review Article**

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# Hurricane Dorian and COVID-19: a review of the consecutive disasters in the Bahamas

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## **ABSTRACT**

The Bahamas are an archipelago of islands north of Cuba and east of Florida, home to around 400,000 people. The Bahamas was hit by Hurricane Dorian which made severe landfall at the end of 2019 and consequently by COVID-19 pandemic in early 2020. This paper provides an overview of Hurricane Dorian and COVID-19 in the Bahamas and a review of the impacts and consequences caused by the disasters on the livelihood, vulnerable population and economy of the Bahamas. Crippled by the double burden of a natural and a biological disaster that happened consecutively, the small island country needs to strengthen its strategic framework to build its preparedness and economy for future events.

Keywords: The Bahamas, Hurricane Dorian, COVID-19, Double disaster

## **INTRODUCTION**

The Bahamas, officially known as the commonwealth of Bahamas is a country within the Lucayan Archipelago of the West Indies in the Caribbean. The Bahamas take up 97% of the Lucayan Archipelago's land area and home to 88% of the archipelago's population. The Bahamas is extremely vulnerable to the impacts of climate change and natural disasters due to its location in the Atlantic hurricane-prone belt. In September 2019, the Bahamas was hit by Hurricane Dorian, which was the fifth category five Atlantic hurricanes to cause landfall with intense destruction of property and loss of life. The Bahamas was juggling with the process of recovering from the impacts of Hurricane Dorian and was immediately crippled by the COVID-19 pandemic.

## OVERVIEW OF HURRICANE DORIAN

Hurricane Dorian, the strongest Atlantic hurricane hit the northern Bahamas on 01 September 2019 and on 02 September 2019, it hit the eastern end of Grand Bahamas.<sup>3</sup> The tropical storm conditions pummeled the northern

Bahamas for 72 hours and the northeastern Grand Bahamas suffered the condition for 40 hours.<sup>3</sup> Additionally, the combination of the storm surge and heavy precipitation caused excessive flooding which was the major cause of the "unprecedented and extensive devastation" as phrased by Hubert Minnis, Bahamian prime minister. The hurricane said to have dragged a two-story-high storm surge onshore, submerging entire neighborhoods and the residents witnessed the strong eyewall winds for 40 hours resulting in one of the most prolonged population exposures to hurricane hazards.<sup>4</sup>

# IMPACT OF HURRICANE DORIAN

Due to the hurricane, there was severe damage that resulted from high winds and storm surge. The hurricane damaged most of the healthcare facilities in the affected areas with severe damage to the Rand memorial hospital and four other clinics.<sup>5</sup> There was significant damage to the infrastructure, medical equipment and vehicles like ambulances due to flooding. There was a lot of destruction in the housing sector, the educational sector, the electrical sector and the educational sector as well. It was assessed that the reconstruction will be a long-term process given

the magnitude of the disaster.<sup>5</sup> There was damage related to the transport infrastructure like roads, ports and airports. The airports suffered operational damage due to the floods and high-speed winds and seaports were impacted by storm surge, waves and wind. Agriculture and fishing were one of the major livelihoods of the natives. The disaster resulted in severe destruction of the crops and markets and the boats. The areas nearly the coast was severely damaged. It was assessed that there was an impact on the livelihood of the farmers, fishermen, docks, packing houses, fish processing houses and many more. One of the health concerns was that of mental health. People who were directly exposed to the impact of Dorian are at elevated risk for developing post-traumatic stress disorder and some may develop major depression and anxiety disorders.7

## **OVERVIEW OF COVID-19**

COVID-19 was declared a public health emergency of international concern by the World Health Organization (WHO) on 30 January 2020. The Bahamas recorded its first case of COVID-19 on 15 March 2020 by the acting minister of health, Jeffery Lloyd. A 61-year-old female resident with no travel history in the past 20 days was the first confirmed case of COVID-19 in the Bahamas. As of 15 August 2020, there have been 1,089 confirmed cases of COVID-19 with 15 deaths.

The Bahamas faced the hurricanes quite a lot but this is rather the first outbreak that it having to deal with. Prime minister, Hubert Minnis on 20 March 2020 announced a 24-hour curfew with effect from 24 March 2020, restricted private gatherings and closure of most businesses. 10 The farmer markets, food stores, pharmacies, gas stations, construction, banks and restaurants were functioning for limited hours. Health care workers and suppliers, government workers, utilities and media were exempted. The prime minister made it mandatory for people to wear masks covering the face in public and also employees were to provide their workers with masks. He also announced shelter-in-place as a response to the outbreak. Coming to the travel aspect, public buses were functioning but only for essential travel. The airport remained open and all nonresidents from mainland china were banned from entry and all residents were to be quarantined upon arrival.<sup>11</sup>

## **CONSEQUENCES OF COVID-19**

The impact of COVID-19 is on both the health and economy of a country. The Bahamas is no exception from this. The variety of curfews, lockdowns and social distancing policies to prevent the spread of the virus, is causing an economic recession in all countries but is a developing country, the Bahamas will face a rise in poverty and unemployment. The Bahamas is said to have a highly concentrated economy, with industry and agriculture and major gain from the tourism sector which has been highly affected. In 2019, the country recorded 7.2 million visitors leading the growth in the economic sector. <sup>12</sup> The Bahamas

is facing greater danger in the economy than in the health scenario. While the cases and death toll due to COVID-19 seems to be under control due to actions taken by the government, the impact on tourism was threatening the country with a rise in unemployment and poverty.

## **DISCUSSION**

The Bahamas was hit back to back by two disasters consecutively. One being a natural disaster that resulted in the loss of life and destruction of property and water and sanitation while the other was a viral pandemic that added on to the existing havoc caused by the hurricane. Following the crisis of Hurricane Dorian, COVID-19 will be affecting the public finances even more. The destruction and damage caused to the healthcare facilities due to the hurricane have added on to compromising the healthcare requirement for COVID-19.

#### **CONCLUSION**

The back to back hit of Hurricane Dorian and COVID-19 was unforeseen. The country needs to be better prepared to stand against similar unanticipated future catastrophes. The communities need to prepare with a strategic plan for future disasters. Disaster resistant architecture for healthcare systems, safe housing and buildings can be planned for more resilience. Early warning systems can be enhanced and citizen engagement in disaster preparedness can be encouraged. As for the pandemic aspect, the healthcare system can be upgraded in such a way to be able to maintain access to services and critical care treatments. Strengthening the health care staff and health professionals should be prioritized. Therefore, more focus and research should be done on strengthening health systems in a county vulnerable to climatic hazards.

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