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Commentary

Philippines braces for the typhoon season amidst COVID-19

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The typhoon season of the Philippines has started amidst a rampaging coronavirus disease (COVID-19) pandemic. The first typhoon, Vongfong, with strong winds of 155 kph (96 mph) and torrential rains pounded the country while on strict lockdown [1]. It placed the health system of the Philippines into a test as a perfect storm developed—a strong typhoon during a devastating pandemic. In a country of 110 million people, Vongfong displaced populations when it entered on 14 May thus complicating the COVID-19 initiatives and adding additional burden to the emergency situation of the country. The Philippines is hit by an average of twenty tropical typhoons every year [2]. These typhoons can be very strong and damaging. It can be recalled that the country is still reeling from the effects of super typhoon Haiyan on 8 November 2013 that killed 6200 people, displacing 4 million and affecting 14 million due to its destructive force [3].

Typhoon Vongfong's impact provides a glimpse on what may happen in the coming typhoons while the country is battling COVID-19. It severely affected the poor and rural island of Samar [4]. Shelters were prepared by the local government as thousands of people were forced to evacuate from their homes. This was also done in anticipation of the possibility of landslides, storm surge and floods that normally come with typhoons. During Vongfong, many communities had to rely on their own initiatives and

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resources as local government disaster response teams were busy with COVID-19 responses. In all these places affected by typhoons, homes made of light materials are normally brought down by strong winds and gusts or washed away by water from floods or storm surge rendering part of the population homeless and staying in crowded shelters.

Typhoons eventually veer towards the central parts of the Philippines. It becomes problematic when they hit urban and highly congested areas, such as the capital of Metro Manila and its suburban areas which have 80% of the country's cases of COVID-19. Vongfong's heavy rains caused flooding and strong winds blew away makeshift tents for patients. A number of tent extensions built in the parking areas of COVID-19 hospitals were damaged. These tents function as triage centers, testing areas and wards to provide more space for the high cases of COVID-19 in the capital [5]. Makeshift tents are also built to keep infectious COVID-19 patients away from immunocompromised patients in the regular hospital wards.

Impact of typhoons, whether in rural or urban settings, takes its toll on poorer communities. Poverty is always a major socioeconomic concern and context in humanitarian emergencies, disasters, and epidemics in the Philippines. Among these affected areas by Vongfong are many poor communities that were already affected by hunger due to limitations of delivery of goods that rely on supply lines hampered by transport stoppage due to lockdown. Existing social divides were amplified by the difficulty of the population due to massive power outages, no public transport, closed markets and as they searched for food, water, and shelter. Even

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if the government assured them of sufficient relief goods, many affected areas did not receive aid [6].

During Vongfong, the population saw how the government reacted. Local officials were instructed to use alternative and more state-owned facilities as evacuation centers to allow the observance of health protocols while the country is experiencing the pandemic. Messages from authorities promoted 'minimum health standards' which includes physical distancing (one meter apart between families), frequent handwashing, and checks for body temperature and symptoms of illness. These were however difficult to follow as there are no handwashing facilities in the centers. Moreover, the reinforcement of physical distancing is made even more problematic given the congestion of individuals in relocation spaces. The international humanitarian and disaster community has yet to develop and disseminate detailed and specific guidelines for these calamites in the middle of a pandemic.

As of 14 June 2020, there are 25,930 positive COVID-19 cases identified with 18,612 active cases in the Philippines. While the cases continue to be identified, and the typhoon season has started, the country has to brace for these twin calamities under a 'new normal'. Pandemics and disasters can massively consume economic resources and impact on population health [7]. Governments must always remain vigilant and ready, and societies always resilient. COVID-19 requires serious attention, but we must not neglect the possibility of other challenges that may be brought to the fore by other disasters.

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Declaration of Competing Interest

We declared no competing interest.

References

- IFRC. Philippines: typhoon Ambo (Vongfong) information bulletin. 14
 May 2020. https://reliefweb.int/report/philippines/philippines-typhoon-ambovongfong-information-bulletinAccessed on 26 May 2020
- [2] PAGASA. Tropical cyclone information. http://bagong.pagasa.dost.gov.ph/climate/ tropical-cyclone-information Accessed on 26 May 2020
- [3] Barmania S. Typhoon Haiyan recovery: progress and challenges. Lancet 2014;383(9924):1197–9. https://doi.org/10.1016/S0140-6736(14)60590-0.
- [4] Philippine Daily Inquirer. 140,000 flee as Typhoon Ambo hits Samar like a 'Yolanda Jr.'16 2020. https://newsinfo.inquirer.net/1275943/140k-flee-as-ambo-hits-samar-like-a-yolanda-jr Accessed on 26 May 2020
- [5] GMA News Online. Ambo destroys NKTI tents for COVID-19 patients.
 19 May 2020. https://www.gmanetwork.com/news/news/metro/738760/ambo-destroys-nkti-tents-for-covid-19-patients/story/ Accessed on 6 June 2020
 [6] ABS-CBN News. 10 million jobless in Philippines due to COVID-
- [6] ABS-CBN News. 10 million jobless in Philippines due to COVID-19 crisis is 'possible,' says labor chief. 21 May 2020. https:// news.abs-cbn.com/business/05/21/20/10-million-jobless-in-philippinesdue-to-covid-19-crisis-is-possible-says-labor-chief Accessed on 6 June 2020
- [7] Oxfam. Loss of critical facilities, water contamination, displacement increase health risks of Ursula survivors. 05 January 2020. https: //reliefweb.int/report/philippines/loss-critical-facilities-water-contaminationdisplacement-increase-health-risks Accessed on 6 June 2020