



Editorial

Role of Environment during COVID-19 Pandemic

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Outbreak of Covid19 is reported as an unusual pneumonia which is link to an animal market that sells poultry, fish and other animals to the public (Xu et al., 2020). This event has been immediately reported to the World Health Organization (WHO). Later, the causal microorganism has been identified as a novel coronavirus that was named SARS CoV2. Genome sequencing and reverse transcription polymerase chain reactions tests of this virus had been done. WHO has been started to quicken diagnostics, therapeutics and vaccine development and a candidate vaccine has been prepared for initial laboratory testing (Wang et al., 2020).

On 30 January 2020, the emergency committee of WHO has declared Covid19 as a global health emergency based of growing case notification rates at China and international locations. Thereafter, the case detection rate is frequently changing on a daily basis and could be tracked in nearly real time on the developed website by Johns Hopkins University and other media. In the middle of February 2020, China suffered the huge burden of morbidity and mortality; subsequently the incidence in other Asian countries, in Europe and North America begin to rise and become the hot spot for Covid19 (Velavan and Meyer, 2020).

WHO has declared the fast spreading of COVID-19 as a pandemic. The people around the globe requested to stay at home. Wuhan city in China is the epicenter of the pandemic with more than 11 million people. It is shown to have produced 200 tons of clinical trash on a single day exactly 24 February 2020 which is four times the amount the city's only dedicated facility can incinerate per day. As coronavirus is spreading rapidly to other parts of the world, very soon the medical waste management could be a big issue. Medical health organizations waste management companies have already taken step in coronavirus decontamination services, it is becoming very crucial for governments to find solutions soon. At the meantime, it is every individual's duty to follow the regulations while discarding of their face masks and other medical wastes (Luan and Ching, 2020). This is possible only by mutual understanding and willingness and world will emerge stronger than this epidemic. Some people are at higher risk of adverse effects from contact to medical wastes as well, including cleaners, trash collectors and some other people who have to spend a great amount of time in public places. All over the world governments stopped students to go to schools and universities, and a lot of employees are being asked to work from home, only those who are maintaining the cleanliness of cities have to go to their jobs daily, that makes them among the most vulnerable groups and one that is highly susceptible to the virus from respiratory shed droplets on the masks. They may also be infected by other pathogens existing in the discarded pieces of garbage, for instance meningitis and Hepatitis B. The masks are made up of plastic based materials that are liquid- resistant and are long lasting after they are discarded, ending up in ocean or landfill. The surgical masks should not be worn longer than one day, discarding them and empty bottles of hand sanitizer along with solid tissue papers are ending up to a huge trail of medical waste in the environment. For instance, in Hong Kong, where COVID- 19 infection started in late January/2020 the medical wastes have already polluted the environment. Recently, an environmental NGO Ocean Asia in Soko islands took a survey, according to it, in Hong Kong a large amount of discarded single-use masks washed up to a 100-meter stretch of beach. Gary Stokes the director of the Ocean Asia NGO, who has been monitoring the ocean surface trash, his team has seen a few masks over the years, but now they were spotted all along the high tide line and seashore with new deposits coming with each current. While this recent COVID-19 outbreak, the general public have started wearing surgical masks in order to take precautionary measures. When 7 million people

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suddenly start wearing one or a couple of masks daily, single use gloves and hand sanitizers, the amount of trash created is going to be substantial. The contrary impacts of such medical wastes are far-reaching. When these are remained discarded in an animal's natural habitat in both land and ocean this could cause animals to mistakenly eat this as food and lead in their death (Hellewell et al., 2020).

Every year, 05 June is earmarked as United Nations flagship day on environment – The World Environment Day and it remains one of the famous vehicles through which the UN stimulates worldwide awareness of the environment to enhance political attention and action, as it promotes ways to address issues of climate change, poor sanitation, air pollution, chemical hazards and conservation of ecosystems. This year's commemorative event is focused on Biodiversity with a theme "Time for Nature".

Recent occurrences, like the ongoing global COVID-19 pandemic, demonstrate the interrelationship between the environment and human health as well as the need to strengthen essential environmental health services, knowledge and national capacities fundamental for achieving universal health coverage. The spillovers of SARS-CoV-2 virus, Ebola, and other infectious pathogens from wildlife (animals) to human being are important reminders on the need for countries to include protection of our biodiversity as part of interventions to effectively manage outbreaks of emerging infectious pathogens that causes sporadic outbreaks, epidemics, or pandemics in human populations through all of government one-health approach.

To date, COVID-19 continues to be a challenge to global public health. The newly emerging SARS-related coronavirus designated as SARS-CoV-2 is the third highly pathogenic *Betacoronavirus* to infect human populations in the twenty-first century (Saadat et al., 2020). SARS-CoV-2 emerged in Wuhan, China in late December 2019 and has spread to more than 210 countries in every continent on earth except Antarctica. COVID-19 is the first pandemic in history to be caused by a coronavirus. While the huge negative effects of living through the COVID-19 pandemic are obvious – psychological stress, fear, severe global economic losses, overwhelmed health care systems and general disruption of societies – the ongoing pandemic may also have some indirect positive impacts. Virus outbreaks often have large negative impacts on human health (Anderson et al., 2020); but changes in our way of life due to outbreak responses may serve as demonstrations of possible positive changes for the environment, health of humans, animals and the ecosystem.

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