

Editorial

The Changing Faces of a Novel Disease

Corona viruses had been with man for close to sixty years. It was regarded as a simple, non-fatal virus with few mortalities. Thus, when flu-related deaths were reported in the last quarter of 2019 in China, the world thought another season of Severe Acute Respiratory Syndrome (SARS) caused by corona had come. The last time the world experienced high-level corona virus-related deaths was between 2003 and 2004 when mortality of more than 1000 patients was reported. Although the World Health Organisation (W.H.O) Country Office in the People's Republic of China first picked up a media statement by the Wuhan Municipal Health Commission from their website on cases of 'viral pneumonia' in Wuhan, People's Republic of China on 31 December 2019, it wasn't until 3rd January 2020 that Chinese officials provided information to WHO on the cluster of cases of 'viral pneumonia of unknown cause' identified in Wuhan. This was also followed by an announcement on January 15, 2020 by the Japanese Ministry of Health, Labour and Welfare which informed WHO of a confirmed case of a novel coronavirus in a person who travelled to Wuhan, becoming the second confirmed case detected outside of the People's Republic of China. By the end of January 2020, it was clear from laboratory and clinical observations that the deaths were caused by a strain of coronavirus having similar features like the general corona virus family. Since the particular corona virus strain had not been identified in humans, it was referred to as a 'novel' coronavirus. Also, through surveillance and epidemiological data, the initial suspicion of animal-to-person spread was confirmed after studies indicated the initial outbreak among people who had a link to a large seafood and live animal market in Wuhan, China. On February 11, 2020, WHO announced that the disease caused by the novel coronavirus would be named COVID-19.

The world began to observe the spread of the virus and its disease as it was being transmitted. For example, Thanks to WHO and several institutional disease monitoring centres around the globe, the world began to monitor updates on the detection and spread of the virus in different countries. The first five months of the year 2020 saw a world less prepared for a pandemic. With lockdowns in many countries, economy of nations started crumbling and personal businesses began to nosedive. Several myths and facts emerged of a relatively unknown disease and deaths rose from a total of 213 in January 2020 to about 180,000 mid-June. Also, it was initially believed (without much scientific proof) that the higher environmental temperatures in most African countries would confer protection from covid-19. This hope was dashed in Nigeria on 27 February 2020 when the first confirmed case announced via an Italian citizen who tested positive for the virus in Lagos. Since then, the number of cases in Nigeria has grown, with Lagos being the epicentre of the pandemic in the country. By June 1, 2020,

the Nigerian total cases had risen to 10,578 with 299 deaths recorded.

That Covid-19 pandemic is characterised by many uncertainties is an understatement. At the early stage, some world leaders even doubted the existence. However, what is now certain is the identity of the pathogen responsible. Also, several questions remained unanswered (or is it unanswerable?) for some time. Why do we have more cases and deaths in some countries? Is it because tests are not being carried out? Are plant-based therapies okay? Will a vaccine against Covid-19 be ready before the end of 2020? The world is waiting for answers.

As expected, several suggestions on therapeutic approaches to Covid-19 were proposed and later debunked. Recently, WHO welcomed initial clinical trial results from the United Kingdom that showed dexamethasone, and hydroxychloroquine could be lifesaving for patients critically ill with COVID-19. Plant-based therapeutic remedies are also being researched into, and it is expected that more insight will be emerging soon. It is therefore not a surprise that three review articles in this issue of the *Nigerian Journal of Physiological Sciences* are focussed on covid-19. The first article looked at the worldwide lockdown and movement restriction, highlighted the consequences of such on the cardiovascular health on a physically inactive African population. The authors recommended culturally related indoor physical activities in Africa such as *ampe* or *tente* that could enhance health. They also suggested dog walking, tending backyard farm and catering for indigenous chicken and small ruminants as means of increasing physical activity. The second review explored the potential of Bromelain, a potent inflammatory and anticoagulatory agent as a potential candidate that may be used to inhibit or prevent the symptoms of Covid-19. The third review paper provides immunological angles to the studies needed by researchers to unravel many unanswered questions on the pathophysiology of the virus.

Three articles are featured on side effects of exposure to potential toxicants, two of which were on mosquito coil, a remedy used to repel mosquitoes in order to prevent malaria in many malaria-endemic countries. With a report that burning mosquito coil for 15 minutes produced up to 312 parts per million (ppm) of CO and raised the blood carboxy-hemoglobin level by 15.8%. In another paper, mosquito coil fumes were shown to be toxic to the stomach and delayed the healing of experimental gastric ulcer. Another article reported the effects of occupational exposure to spray paints.

Apart from the afore-mentioned articles, this issue has many interesting articles in many specialties of physiological sciences that should interest the open-minded researcher.