JMSR
Journal of Medical and Scientific Research

EDITORIAL

The COVID-19 pandemic- can we tame the Goliath?

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Received 26 March 2020; *Accepted* 02 April 2020; *Published* 06 April 2020

Citation: Jiwani S, Rao BH. The COVID-19 pandemic- can we tame the Goliath? J Med Sci Res. 2020; 8(2):37-39. DOI: http://dx.doi.org/10.17727/JMSR.2020/8-e1

The humanity at large is writhing under the onslaught of coronavirus disease (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) or the novel coronavirus (nCoV). This is not just the infected ones or even those exposed or suspected to be, but by the volumes of scientific, regulatory and media write ups on all platforms of communication. It took a few weeks from saying "It is a local Chinese issue- No big deal for us" to declaring emergency. Originating in Wuhan, Hubei province of China as a Zoonotic outbreak, in December 2019 a cluster of cases has rapidly spread across continents [1-3]. The rapid spread to about 200 countries, resulted in the World Health Organization (WHO) declaring the onset of a pandemic on 11th March 2020 [4]. The alarming transcontinental migration of this enveloped RNA beta coronavirus similar to Middle East respiratory syndrome coronavirus (MERS-CoV) and SARS-CoV has not been benign [5]. It has resulted in over 4 million cases, and nearly 3 lakh fatalities, and still counting by the day [6]. It is spreading with a purposeful logarithmic acceleration, killing lakhs of people, threatening to cause a collapse of the health care system and devastate the economy.

Our previous experience in the last 2 decades with corona virus was with SARS- CoV in 2002 & 2003 and MERS- CoV (2012 to the present).

In both these instances, the case fatality rates were 9 to 10% and 36%, respectively. The current pandemic has demonstrated a general case fatality

rate of 1.4-2%, which is higher in older, immuno-compromised and those with co- morbidities [7]. But emerging global data conveys that the number of asymptomatic or minimally symptomatic COVID-19 cases are far too many, indicating that the fatality rate of this virus is in reality much less. This positive and encouraging fact must be balanced against the knowledge that there could be a virulent strain harboring on humanity in some parts of the globe leading to relatively worse outcomes. In the timeline of science, communications and political maturity we are certainly ahead of previous pandemics. The primary available tools unfortunately are limited to infection control, quarantine and supportive treatment of cases. Though the reflexes of political leadership across the world, have shown certain degree of latency, non-uniformity and heteregenity, yet they have been fairly decisive in immigration policies resulting in sealing international borders, curtailing domestic and trans-continental traffic. The introduction of social distancing, secluding senior citizens, quarantine of suspected cases, and periodic hand hygiene has been surprisingly well adopted even in the less socially organized nations. The utilization of enforcement authorities, including armed forces to seek out individuals needing quarantine and actively ensuring their containment has been no easy task yet being achieved globally. These are strategies every country need to adopt. The price of "do nothing" is lakhs of cases overpowering the existing ICU's, causing non-availability of resources to treat other ailments for which patients come to hospitals. The next strategic level of attack must include a rapid, and widely available simple diagnostic kits to actively identify cases particularly those with little or no symptoms in order to achieve effective and targeted isolation. Although the FDA has approved a few hands held rapid PCR tests, the challenge will be the global supply of these devices in large numbers. Historical wisdom of decades of treating infectious diseases has taught us that specific antibiotics are game changers. An urgently conducted randomized controlled trial of antivirals-lopinavir–ritonavir in a population of 199 patients with laboratory-confirmed SARS-CoV-2 infection disappointingly did not show a benefit over standard care [8]. A small French study using hydroxychloroquine and azithromycin has shown some promise [9]. Despite the absence of robust data, there is increased enthusiasm currently to use hydroxychloroquine as a prophylactic agent in those exposed to COVID cases particularly health care workers [10]. The huge population of susceptible humanity that needs to be protected by immunization is the next challenge, which will hopefully be overcome by development of a vaccine. Though companies and institutions are racing to produce a vaccine, with China sharing the genetic sequence of the virus. Rational prudence tells us that these will have to go through phase I-III human trials before regulatory approval for global vaccination is available. The unified and focused battle across continents, socio-political affiliations and economic layers against this rapidly proliferating speck of RNA, will doubtless result in tangible results. This endpoint needs to be achieved in the closely visually perceivable future before we experience a human holocaust and devastation on our economy which will be difficult to revive.

An emerging viewpoint which is gradually appearing to be a hard fact, is whether the human race will have to learn to live in harmony with this virus. All the measures adopted worldwide aiming at the containment of this viral holocaust, may not be temporary. This may indicate the era of a new beginning, a new normal that we may have to reconcile. A new set of unified global rules of civilized living will soon be written, to be adopted across lines of color, race, nationalities and religion. These will erase, and supersede current norms of social interaction and dictate guidelines for work, travel and recreation. Masked faces will be the norm, physical distancing the key, hand sanitizer market will boom, so will digital technology as professional interactions will be routinely via media. Education, professional consultations, job works will predominantly turn online. Personal interaction with patients will be minimised, as most of medical practice will be no-touch. Remote diagnostics and monitoring devices will replace clinical examination. The threshold on performance of invasive procedures may reluctantly increase and the health industry needs to find methods for economic compensation.

The question remains did we tame or were we?

Conflicts of interest

Authors declare no conflicts of interest.

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