



Editorial

Coronavirus disease 2019: A disease of equal opportunity, nature and nurture

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ABSTRACT

Coronaviruses are responsible for over 50% of all cases of flu in human and animals for the past half-decade. Most of the diseases were largely seasonal, mild, and self-limiting save for severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), and currently coronavirus disease 2019 (COVID-19) diagnosed in 2003, 2012, and 2019, respectively. COVID-19 pandemic poses a threat to the entire globe with conflicting and controversial information, challenges in the pathogenesis, control, and management. A common denominator is that it has proven to be an equal opportunity disease and that of nature and nurture with hard psycho-socio-economic lessons for the entire globe.

Keywords: Coronavirus, Coronavirus disease 2019, Opportunity, Nature, Nurture

INTRODUCTION

Coronaviruses are responsible for over 50% of all cases of flu in human and animals for the past half-decade.^[1] Most of the diseases were largely seasonal, mild, and self-limiting save for severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS) diagnosed in 2003 and 2012, respectively.^[2] The WHO was largely criticized for hastily declaring SARS a pandemic which probably explained the caution and apparent delay in making the pronouncement on the coronavirus disease 2019 (COVID-19).

COVID-19 is the disease caused by SARS-CoV-2 virus, a nouvelle strain of the causative agent of SARS. Following the discovery in Wuhan, China, at the eve of December 2019, the world has never been the same. Within 2 months, it has spread to every part of the world. World leaders, royalties, and ordinary people are infected in thousands daily across the globe. The scientific world has been in turmoil and rapidly processing information (including conflicting and contradictory ones) on this disease. The natural history of the organism has been meshed in controversy, ranging from natural transmutation from lower animals to several theories of conspiracy including laboratory accidents, bioterrorism, technological self-destruction, and distortion of nature.^[3]

Information also abounds on the modes of transmission including contact, fomites, aerosol, and cadavers. The trend is not different regarding possible treatment which has thrown-up antivirals, antimalarials – hydroxychloroquine, antibiotics – azithromycin, and food supplements/micronutrients, for example, zinc, Vitamin C, some herbs/natural remedies including steam

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inhalations. The search for vaccine has been intense and fiercely competitive among companies leading to over seventy candidates at different stages of development.

Furthermore, literally every discipline of orthodox medicine has a role to play in the management of COVID-19 given its pathogenesis and sequelae. The pathologists and laboratory scientists play key roles in the diagnosis and recently the hematologist has major role following the new discovery on the association with hemoglobinopathies. The ENT surgeons, the respiratory physicians, cardiologists, intensivists, emergency physicians, and all divisions of surgeries given maintenance of the airways. The dermatological, ophthalmic manifestations of COVID-19 are currently being studied.^[4,5] The clinical psychologists, pharmacologists, nutritionists, and behavioral scientists input in the management of the patients, their contacts, and families are invaluable. The end-stage disease is marked by multiple organ failures requiring managerial input of all specialties of modern medicine and affiliates teams. The public health physicians and health policy planners must be on top of their game round the clock for efficient planning and coordination of surveillance, containment, and eradication of COVID-19.

In the midst of all the rapid information, controversies, and seemingly stratified advancements in technology across the globe, a common denominator lies in the huge morbidity and mortality emanating from COVID-19. The exposition of the inadequacies in health and socioeconomic sectors of both the developed and developing countries is palpable. The COVID-19 pandemic appears to be an equalizer across the rich, the poor, educated, and illiterates in the society. This paper is set to explore this paradox of reality.

EQUAL OPPORTUNITIES

Ironically, the disease cuts across social class, race, and other socioeconomic classifications. It is a “class-less” disease and therefore can be referred to as “an equal opportunity disease.” Advanced countries are having fair share of challenges in curbing the disease including high mortality. It’s proven that no clime or divide of the word is immune to COVID-19. The temperate and the sub-Saharan regions are affected. Travels are banned and borders shut. Even, the rich cannot travel to seek for a better health-care provision outside their clime. Each citizen that gets infected is meant to utilize her health-care system and facilities in getting managed. The available medical facilities worldwide appear limited and demand had exceeded supply for basic and advanced personal protective materials/equipment such as face masks, gloves, gowns, respirators, and ventilators. Manufacturers are hoarding their products for countries of affiliation, yet no country has sufficient supply. It is known that all ages are affected and there is no predilection for sex. Information evolving on daily bases support this proposition of equalities among men.

NATURE AND NURTURE

Furthermore, COVID-19 remains a disease of nature and nurture. Whereas, the biological management, i.e., preventive and supportive management of cases is to be aggressively managed, the environmental factors focusing on addressing the economic, psychological, and social well-being of the populace and the frontliners are as important in addressing this disease. Every country – rich, middle class, and poor, for the 1st time, is beginning to address the collective fundamental needs of her populace including food, shelter, and water (palliatives).

The populace is being nurtured with adequate and portable basic incentives such as food, water, security, and light as the minimum required to be able to obtain their cooperation. Otherwise, the lockdown rules being implemented to curtail spread and also buy time for aggressive management of the situation, may not succeed. This nurture is a collective measure and cut across all classes (wealthy, middle class, and poor). The rumbling of nature has made addressing the needs of the people irrespective of class as a collective responsibility. A quasi-socialist life is being practiced intuitively by every economy of the world including the greatest and ardent unrepentant capitalists. Nourishments, physical cash, and securities are voluntarily being injected into homes and companies to maintain jobs. Social securities are being mimicked by even countries that have never dreamt of portable welfare for her citizens and workers.

Contracts and psychological contracts are being negotiated and renegotiated between the citizens and the leaders seamlessly. The rich is beginning to voluntarily devour percentage of their earnings for the collective well-being of all. Donations are flying from every corners and angles daily because the world is not safe for both rich and poor.

On the other hand, security and risk reduction for the health workers have not been left out as health insurance, provision of adequate protective materials and incentives for the health workers are being pursued worldwide. The role of the medical doctors and other health workers as the “geese that lay golden eggs” that the lives of the nations including the progress of the economy depend on has become so obvious. Conscious and unconscious efforts are being made to ensure that this happens except for societies that are yet to come in terms with the reality of COVID-19. The social welfare, income, and wages of these class of workers are receiving great attention without a fight. All the rots and injustices perpetrated on them over the years have erupted like volcano and receiving positive attention unhindered. This is tantamount to winning wars without losing a bullet. Most countries are now producing medical equipment and drugs which will, in turn, boost the infrastructure.

THE ENVIRONMENTAL DEGRADATION

The level of disruptions to the natural flora and fauna of the universe caused by human activities over the years had taken immense proportion. Unquantifiable is the volume of hydrocarbon emitted daily through air transportation into the atmosphere. For over 1 month, the atmosphere and the clouds have remained free of these unquantifiable emissions from hundreds of thousands of aircrafts that fly the space across the world. The land transportation is not an exception, the volume of vehicles that ply the roads for business and pleasure has also reduced. Imagine the volume of carbon monoxide emissions that accompany these activities daily. The same goes for ships and human escapades in the seas that disrupt aquatic lives. Noise, chemical, and electromagnetic pollutions that accompany the operational services of major companies across the globe have also been grounded due to shutting down of such investments. It is amazing to realize that there has not been news of incessant cases of natural disasters – hurricane, tornadoes, plane crashes, etc., within this period of global adversity.

Psychological relationship and level of true bonding among families and perceived loved ones had also been seriously but truly put to test within this period. Families that had never been together in recent time had been brought together by this disease of “nature and nurture.” It is an open opportunities for a reevaluation of life, support, and core values in the family and among human beings. Realities on part of our sociobehavioral lives that require urgent amendments are beginning to manifest.

RECOMMENDATIONS

Second Chance – As survivors of COVID-19, we would have obtained a second opportunity to rebuild lives, relationships, and our core values.

- a. Governance and leadership system should be people oriented and redesigned to cater for the basic needs of the citizens.
- b. The economy should be reconfigured according to the peculiarities and needs of each country. The small-scale industries across the hinter lands must be developed along with the multinationals. The “copy and paste” syndrome by developing countries must change to give room for natural evolution along the peculiar needs of individual countries.
- c. The health-care system must be reengineered and all our hospitals adequately equipped up to acceptable standard to carter for the health needs of the country. This is a prime opportunity to massively invest into our health-care system and practically reverse the health-care tourism and brain drain. The legislatures should courageously enforce laws that will dissuade flimsy procurement of medical care outside the country.

- d. The education sector needs to step up activities given the level of illiteracy revealed during the course of the COVID-19. True grass root mass education must be enforced across every length and breadth of Nigeria and other developing countries. Every child must be educated to basic level and their parents made to take responsibility.
- e. The industries should be supported and encouraged to refocus their production according to the fundamental needs of the various sectors of the countries. Ingenuity and attempts at manufacturing hospital, educational, and agricultural implements should be enforced. A time like this reminds each and every one of us that what we have failed to do rightly yesterday shall obviously haunt our today and even tomorrow. Need for concerted planning and investment into social securities now becomes imperative.
- f. Protection of the frontliners – The preservation of the health workers and all frontliners through the provision of adequate personal protective equipment (PPE), life insurance, and social welfare provisions should not be only during emergency periods. It should be institutionalized.
- g. Triaging of the health workers – Basic scientific screening implements such as effective and efficient serological tests should be deployed to assess the level of immunity of the health workers against COVID-19. Such serological tests in addition to the conventional nasal/throat swabs shall be performed on all the frontline health workers to assess the level of herd immunity (IgG and IgM). Triaging them along that line is desirable to provide physical/psychological support and safety. Those with strong immunity should be deployed to handle the active diseased/highly infectious patients and the others with low immunity retained as second liners. The recall of retired health workers into active service should be discouraged since these senior citizens (60 years and above) fall within the most susceptible group to COVID-19. Much more effort at protecting the actively serving officers should be the stake.

CONCLUSION

Prevention of spread, protection of the uninfected, identification of the infected, and provision of adequate supportive therapy remain the way toward the curtailing of COVID-19 disease pandemic, while the active search for vaccine and efficient treatment continues. It is a fact that COVID-19 is a disease of equal opportunity, nature and nurture with hard psycho-socio-economic lessons for the entire globe.

REFERENCES

1. Jonsdottir HR, Dijkman R. Coronaviruses and the human airway: A universal system for virus-host interaction studies.

- Virol J 2006;13:24.
2. National Institute for Allergy and Infectious Diseases. COVID-19, MERS and SARS. Available from: <https://www.nniaid.nih.gov/diseases-conditions/COVID-19>. [Last accessed on 2020 Apr 20].
 3. Millán-Oñate J, Rodríguez-Morales AJ, Camacho-Moreno G, Mendoza-Ramírez H, Rodríguez-Sabogal IA, Álvarez-Moreno C. A new emerging zoonotic virus of concern: The 2019 novel Coronavirus (COVID-19). *Infectio* 2020;24:57-61.
 4. Recalcati S. Cutaneous manifestations in COVID-19: A first perspective. *J Eur Acad Dermatol Venereol* 2020. Doi: 10.1111/JDV.16387.
 5. Wu P, Duan F, Luo C, Liu Q, Qu X, Liang L, *et al*. Characteristics of ocular findings of patients with coronavirus disease 2019 (COVID-19) in Hubei Province, China. *JAMA Ophthalmol* 2020:e201291. Doi: 10.1001/jamaophthalmol.2020.1291.

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