COVID 3RD WAVE: REALITY & POSSIBILITIES: A REVIEW

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ABSTRACT

The novel coronavirus disease (COVID-19) originated from China and spread globally within a short period. The spread of the first and second wave of COVID-19 were influenced by factors such as population density and weather changes. Are as that are densely populated have reported increased confirmed cases of COVID-19 compared to less populated areas. The main reason for this could be the fact that it is difficult to practice social distancing in overpopulated countries. With regards to temperature changes, most respiratory infections affect people when temperatures are low. This is exaggerated when there is increased air pollution in the environment. Economic factors have prevented countries to conduct a lockdown of epicentre towns and cities. This is in fear of an economic shut down because some cities are economic cornerstones of countries. The initiation and implementation of COVID-19 vaccination programs will help reduce the disease burden. However, there is need to improve the awareness and uptake of COVID-19 vaccines globally. Low COVID-19 vaccine acceptability and uptake due vaccine hesitancy have been reported globally. Hence, in this paper, the possibilities and the realities that influence the spread of COVID-19 third wave have been discussed.

Keywords: Third Wave, Factors, Coronavirus Disease

I. INTRODUCTION

The novel coronavirus disease 2019 (COVID-19) was first reported in December 2019. The first cases are believed to have originated from the Wuhan City of China. COVID-19 is caused by severe acute respiratory syndrome coronavirus 2 that is usually transmitted through inhalation of the virus.¹³ Patients present with a dry cough, headache, fever, diarrhea, fatigue, difficulty in breathing, and chest pain. Being a respiratory tract infection, COVID-19 airborne transmission is the major route of the spread of SAR-CoV-2 among different populations more especially in crowded environments. However, provided that people abide by the preventive measures against COVID-19, the spread is likely to decline.¹⁴ Researchers warned of the possibility of the second wave of COVID-19, towards the end of the year 2020, the second wave of COVID19 hit many countries. This could have occurred due to several factors. In this paper, the possibilities and the realities that influence the spread of COVID-19 third wave have been discussed.
II. VARIOUS FACTORS AND MISINFORMATION ABOUT COVID-19

Many countries, especially developing countries, cannot afford to go into complete lockdown due to fear of an economic meltdown. Many people depend on their daily earnings to survive in meeting their day-to-day needs. Hence, practices such as social distancing may be difficult to implement as certain jobs or businesses require people to interact with others and be in crowded places. Therefore, a total lockdown can mean that most people will have no jobs, no food, and no money to buy what they need, hence, adding a burden to already increased unemployment levels in low-income countries. Political leaders play important roles in curbing the transmission and spread of COVID-19. However, political leaders may lead to the escalation of COVID-19 cases and deaths if they ignore science, set priorities other than curbing COVID-19, ignore preventive measures such as wearing of face masks and social distancing and ignoring transparent coordination of public health efforts in the fight against COVID-19. Political leaders must ensure they observe the COVID-19 preventive measures such as masking up at all times, reduction in group sizes to a maximum of 50 people, hand sanitizing, adequate handwashing, and social distancing. The continued religious gatherings in some countries are another factor fostering the transmission and spread of SARS-CoV-2. Besides, due to traditional and religious beliefs, some people still think COVID-19 is a myth and does not exist. The negative perceptions about COVID-19 have continued being among the major factors leading to the escalation of COVID-19 infections. Therefore, measures must be taken into consideration to address all factors that are contributing to the continuous transmission. There has been a lot of misinformation about COVID-19, especially via social media like Facebook. There is strong evidence that the recommended COVID-19 preventive measures (social and physical distancing, wearing of face masks and adequate washing of hands) reduce the risk of being. Conspiracy theories about COVID-19 and vaccines continue to be a global problem. Therefore, health authorities must ensure that they monitor and address all the misinformation regarding COVID-19 prevention, treatment and vaccinations.

III. CHANGE IN WEATHER PATTERNS

Some studies have shown that there is a relationship between a decrease in temperature and an increase in the number of confirmed cases of COVID-19. This shows that warm weather leads to a decline in confirmed COVID-19 cases while cold weather leads to an increase in daily reported COVID-19 cases. Unfortunately, there is no confirmed evidence supporting that warm weather leads to a decline in the number of COVID-19 confirmed cases. As a result of climate change, changes in weather patterns have influenced air pollution and thus the spread of respiratory tract infections.

IV. POPULATION DENSITY COVID-19

COVID-19 has been reported to spread faster in highdensity populations. Population density plays a vital role in the spread of COVID-19 in that it increases air pollution. Therefore, if a geographical area is overpopulated, the chances of continuous spread of COVID-19 are very high. Overpopulation has been reported to make it difficult for people to practice social distancing. It is evident that even in crowded sports events, the transmission of COVID-19 is very high. Therefore, to reduce the transmission and spread of COVID-19, social gatherings and crowds must be minimized.

V. PREMATURE RELAXATION OF INTERVENTIONS

During the peak of the first wave of COVID-19, the majority of people adhered to preventive measures. Unfortunately, towards the end of the year 2020, most people relaxed and never paid attention to the COVID-19 preventive measures. As a result, the second wave of COVID-19 was reported in different countries and it claimed a lot of lives. Relaxation in adhering to the recommended COVID-19 guidelines has put the globe at risk of the third wave of the pandemic.

VI. FACTORS INFLUENCING INCREASED MORTALITY RATE ASSOCIATED WITH AND DUE TO COVID-19

Studies have reported that mortality due to and associated with COVID-19 has been worsened by the existence of concurrent or chronic infections in COVID-19 positive patients. Among the commonest conditions that lead to increased mortality among COVID-19 patients include myocardial infarction, chronic pulmonary disease, renal disease, congested heart disease, liver disease, dementia, and metastatic solid tumors. The death rate is high in elderly patients because of the history and comorbidities such as diabetes, cardiovascular and lung disease). Poor health-seeking behavior also increases mortality and thus many deaths have been reported as brought-in dead. People choose to self-medicate while their condition worsens. This may lead to exacerbation of COVID-19
infections and mortality. Lack of vaccines and no proven treatment modalities have led to failure to contain the COVID-19 pandemic. The good news is that, many pharmaceutical companies are now developing vaccines for use against COVID-19. The vaccines will protect people against the deadly virus, SARS-CoV-2. However, access to quality, safe and effective COVID-19 vaccines remain a global challenge.

VII. CONCLUSION

The second wave of COVID-19 has led to increased morbidity and mortality rates more especially in the developing countries. There is a risk of experiencing a third wave of COVID-19 in many countries due to many factors. Factors such as weather patterns, politics, economics, population density, and comorbidities have led to the continuous transmission and spread of the SARS-CoV-2. Lack of vaccines, treatment modalities and COVID-19 test kits are among contributing factors to the worsening and continuous transmission, spread and increased morbidity rates associated with COVID-19. There is a need to promote the awareness of COVID-19 vaccination programs globally in order to increase the acceptability and uptake of the vaccines.

REFERENCES