203-207

http://dx.doi.org/10.7197/cmj.vi.755576

Avoiding an imminent catastrophe from COVID-19 pandemic in Africa: The need to urgently prohibit mass gatherings

Afrika'da COVID-19 pandemisinden oluşabilecek falaketten kaçınmak: Kitlesel toplantıları acilen yasaklama gereği

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Received/Accepted: June 20, 2020 / July 09, 2020

Conflict of interest: There is not a conflict of interest.

SUMMARY

The World Health Organization (WHO) declared the novel coronavirus disease 2019 (COVID-19) outbreak which first emanated from China in December, 2019 as a Public Health Emergency of International Concern (PHEIC) on January 30, 2020, and a global pandemic on March 11, 2020. As of June 20, 2020, over 8,687,231 people have been infected with 460,530 deaths recorded in 188 countries/regions, thereby posing a huge burden to healthcare systems globally. Mass gatherings (MGs) are a major risk factor for the widespread transmission of COVID-19. This has pushed many countries to enforce strict lock downs and restrictions of movement to curb the spread of the disease. Despite the continuous spike in confirmed cases around the globe, few countries are either not taking strict preventive measures or handling the pandemic with levity. Instead, there have been calls for the cessation of all forms of lock down and restrictions on movements and mass gatherings. The increasing COVID-19 spread across Africa demonstrates the role of mass gatherings in aggravation of the domain of the pandemic. As this pandemic continues to threaten public health and safety globally, essential precautions and mitigative measures remain supreme and must be strictly encouraged and enforced among African countries to combat this scourge.

Keywords: Africa, Coronavirus, COVID-19, mass gatherings, pandemic



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ÖZET

Dünya Sağlık Örgütü (DSÖ) yeni tip koronavirus hastalığının (COVID-19) Aralık 2019'da Çin'de ortaya çıktığını, 30 Ocak 2020 tarihinde Uluslararası Acil Durumolduğunu ve 11 Mart 2020'de Dünya çapında bir pandemi olduğunu ilan etti. 20 Haziran 2020 itibariyle 188 ülke/bölgede 8,687,231kişinin enfekte olduğu ve 460,530 kişinin ise öldüğü bildirilmiştir, küresel olarak sağlık sistemlerine çok büyük bir yük getirmiştir. Kitlesel toplantılar COVID-19 bulaşı açısından önemli bir risk faktörüdür. Bu durum, birçok ülkeyi hastalığın yayılmasını engellemek için sıkı karantina önlemeri ve hareket kısıtlamaları uygulamaya zorladı. Dünya çapında teyit edilmiş vakalardaki sürekli artışa rağmen, bazı ülkeler ise ya katı önleyici tedbirler almıyorlar ya da salgını ciddiyetsizce ele alıyorlar. Karantina önlemlerinin durdurulması, hareket serbestliği ve kitlesel toplantıların açılması yönünde çağrı yapıyorlar. Afrika'ya yayılan COVID-19'un artması, pandemik alanın şiddetlenmesinde kitlesel toplantılarının rolü olduğu belirtilmektedir. Bu salgın küresel olarak halk sağlığını ve güvenliğini tehdit etmeye devam ederken, temel önlemler ve yatıştırıcı tedbirler en üst düzeyde tutulmalı, Africa ülkeleri bu felaket ile savaşmaya teşvik edilmelidir.

Anahtar sözcükler: Afrika, Koronavirus, COVID-19, kitlesel toplanti, pandemi

INTRODUCTION

On January 30, 2020, the World Health Organization (WHO) declared the deadly and novel coronavirus disease 2019 (COVID-19) outbreak as a Public Health Emergency of International Concern¹. It was later announced as a global pandemic on March 11, 2020, when the number of confirmed cases outside China increased by 13-folds and the number of countries with affected cases had tripled. As of June 20, 2020, over 8,687,231 people have been infected with 460,530 deaths recorded in 188 countries/regions², thus creating exceptional pressure and burden to health-care systems and the world in general. Findings have shown that population densities and intensity of social and physical contacts are the major drivers for the generation and expansion of this new respiratory virus known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)³. Thus, mass gatherings (MGs) are a high-risk factor for the rapid circulation of COVID-19 around the globe. This has prompted many nations around the world such as the USA, Brazil, Russia, India, UK, and Italy, who are at the forefront of combating this pandemic to enforce total lockdown and restrictions of movement in order to curtail the spread of the disease. However, few countries are either not taking strict preventive measures or handling the pandemic with levity. At the emergence of COVID-19, one of the measures recommended by WHO was the prohibition of mass gatherings. The WHO considers any event that concentrates a number of individuals in a single location with the potential of impacting negatively on the planning and health resources of that community as a mass gathering ⁴. Events such as local or international religious gatherings, sports festivals, local conferences, and meetings can be considered as mass gatherings.

The arrival of the novel causative pathogen (SARS-CoV-2) of COVID-19 in Wuhan city, China as reported in December 2019 has redirected universal consideration on the potential spread of a pandemic via activities involving mass gatherings (MGs). Mass gatherings (MGs) demonstrate a historic difficulty in safeguarding the health and safety of participants. The vast majority of mass

gatherings in Africa and around the world are religious, music and sporting events. A classical example of religious mass gatherings is the Hajj/Umrah and Jerusalem pilgrimages that occur annually in Mecca, KSA, and Jerusalem, Isreal respectively amongst others. Notable among the global sporting events are the Olympics and World Cup, which usually boast of millions of attendees from far and near. Worthy of note from concerned researchers and advocacy groups is the call for the suspension of Umrah and the likely postponement of the Hajj and Olympics Games ⁵. The prons and cons of strict adherence to the prohibition of mass gatherings (MGs) during this current disease outbreak are evidently supported. The swift suspension of the annual Umrah pilgrimage by Saudi Arabia's government proved to be defensive and life-saving, while the decision of the Iranian government to allow the Mashhad and Qom event to take place, despite the mass influx of attendees from around the globe has been harmful and pernicious. These aforementioned events and many others place distinct health risks and threats to participants and the host countries. Therefore permitting mass gatherings in this situation has the capability to jeopardise the health and safety of millions of participants. It is therefore imperative that African countries take a collective and pragmatic approach to mass gatherings, as the health and safety of vulnerable attendees in such events are somewhat ambitious.

Periodic outbreaks of COVID-19 has continue to take place in several other nations of the world since it first broke out in Wuhan city, China. However, none of them can be compared to the magnitude reported in the United States of America (USA), which is now considered the first epicenter of COVID-19². The outbreak in the USA and most parts of the world were never anticipated and global attempts at the early stages of the outbreak were geared primarily towards containing the spread via major transport channels from China. The World Health Organization (WHO) confirmed the first case of COVID-19 in the USA on January 20, 2020, when the total number of COVID-19 cases around the world were only 581⁶. This report sent a great tremor and panic of a potential

pandemic and threat to public safety across the USA and the world in general. This prompted the USA government to encourage their citizens on respiratory and personal hygiene practices, social while suggesting distancing measures the lockdown of social and economic activities. It was gathered that not all the states in the USA fully complied at that time, as some states took sweeping action while others took limited approaches. Afterwards, the outbreak continues to spike contrary to what was earlier observed in few countries at that time, and before the national health authorities and agencies could get hold of the situation, the virus had stamped his feet on the country. Presently, the virus has infiltrated and spread throughout the USA and its neighbouring countries; containment strategies seem to be failing, as mitigation of impacts of the pandemic seems to be the last resort. As of June 20, 2020, the USA has recorded 2,222,576 confirmed cases of COVID-19 and 119,131 deaths². Furthermore, Brazil, which is considered to be the second epicenter of COVID-19 recorded its index case of on February 26, 2020, and as of June 20, 2020, had recorded 1,032,913 cases with 48,954 deaths².

While the clamour for the cessation of all forms of lockdown and restrictions on movements and mass gatherings in various quarters keep rising; one crucial question that require an answer is that in the case of a continuous surge in COVID-19 outbreak, how many African countries can boast of a reliable health care facilities to handle and curtail it? ⁷⁻¹⁰. According to the World population publication review, it was reported that out of about 195 countries in the world, only about 13 have a wellfunctioning healthcare system ¹¹. Furthermore, based on the World Bank and WHO, at least half of the world's population cannot obtain essential healthcare services ¹². A steady rise in the number of cases has been observed in Africa since the first coronavirus disease 2019 (COVID-19) case broke out on February 14 2020, in Egypt ^{8,9}. As of June 20, 2020, South Africa and Egypt are the leading epicenters with high recorded number of COVID-19 cases in Africa (87.715 cases, 1.831 deaths and 52,211 cases, 2,017 deaths respectively) 2 . The increasing COVID-19 spread across Africa demonstrates the role of mass gatherings in aggravation of the domain of the pandemic. Therefore, the abeyance and cancellation of all forms of mass gatherings would be important to the mitigation of further spread of this outbreak, as the mitigation of the impacts of any known pandemic is of high priority than containment or control measures. The implication of mass gatherings to transmission of diseases is directly related to the efficiency of transmission known as the basic reproduction number (Ro) in epidemiology. The basic reproduction number of COVID-19 in Africa between 1 March and 19 March, 2020 as reported by a study was 2.37 with an estimated exponential growth of 0.22 per day ¹³. This suggests that the present pandemic could continually rise swiftly in Africa if preventive and mitigative measures are not stringently enforced and sustained ⁷⁻¹⁰, which involves bans on local and international travels and importantly mass gatherings.

Respiratory diseases are the most frequent infections transmitted during mass gatherings. The transmission of COVID-19 can occur either by direct contact with infected people or via indirect in the contact with surfaces immediate environment or with objects used on infected persons. Person-to-person contacts is the major mode of transmission and an unisolated infected individual have the tendency to contact and infect more than one person per day and each of those infected persons could also transmit the virus to others. Some of the symptoms of COVID-19 include coughing, sneezing, high fever among others, and asymptomatic patients have been reported to account for about 25% of transmissions recorded ¹⁴. Thus, a combination of proven strategies such as implementation of social and physical distancing, cancellation of societal functions and prohibition of public events are highly recommended in order to successfully mitigate the COVID-19 pandemic in Africa. This has also prompted the WHO to continually recommend guidelines for mass gatherings alongside contact precautions for frontline health workers caring for COVID-19 patients including good disposal measures ^{10,14}.

As this pandemic continues to threaten public health and safety globally, essential precautions and mitigative measures remain supreme and must be strictly encouraged and enforced ⁷⁻¹⁰. They include sneeze and cough etiquette, strict and regular hand washing hygiene and the use of face masks, especially when amidst persons showing COVID-19 symptoms. There is a need to educate the general public who may lack the knowledge of proper hand hygiene on the best way to wash their hands with soap and clean water regularly, prior to and after eating and visiting the toilets. They should also be sensitized on the need to wash their hands for a minimum of 20 seconds or make use of alcohol-based hand sanitizers as an effective alternative. Notable among the principal measures needed to further prevent the transmission of COVID-19 in our communities is the strict enforcement of social and physical distancing, to

minimize the tendencies of contact between infected individuals and the non-infected ¹⁵. Though the execution of social distancing rules in Africa could be tough, particularly when they have a momentous consequence on the economy, sociocultural, religious and mental wellbeing of the population, it is however achievable. The implementation of the prohibition of mass gatherings and adherence to social distancing rules in the majority of Africa countries has been in effect since 3 months ago, nevertheless many have questioned its long-term sustainability. The successful effectuation of these strategies may be challenged by certain factors peculiar to the continent, such as its degree of urbanization, sociocultural and religious principles, economic and financial activities amongst others.

Africa requires a continuous level of rich preparedness and sophisticated public health response abilities fortified by the cognate knowledge and technical know-how acquired during its management of Ebola virus reported in 2014. Thus, there is a collective responsibility of Africa nations to successfully plan, implement and manage all available resources needed to effectively tackle the onward spread of COVID-19 ⁹. The rigid and critical ban on mass gatherings and enforcement of social distancing in the light of religious, socio-economic, and political issues may be partly responsible for the shape in the epidemic curve in Africa. How effective are these strategies is a major concern for governments and health policy makers as they continually intensify efforts towards combating the COVID-19 pandemic ⁹. Furthermore, for these interventions to yield meaningful results and be complied with, it demands an effective risk communication with the public and citizenry. The public need to be properly educated on the nature of the pandemic and the rationale behind the regulations on mass gatherings and physical contacts. In spite of the numerous hard decisions that needs to be taken during this COVID-19 pandemic, the prohibition on mass gatherings has been and will continue to play a pivotal role in curtailing the uncontrollable spread of COVID-19 in Africa and globally.

Conclusively, mass gatherings remains one of the fundamental causal factors of epidemiologic spread of disease outbreaks globally. In addition, as the public health burden of the new coronavirus disease 2019 (COVID-19) is posed to continually rise in Africa, there is no better time for urgent and drastic decisions than now. Hence, the need for immediate prohibition of mass gatherings to curtail the further spread of this disease within our localities and communities in Africa. It is therefore

advised that health institutions and regulatory bodies in African countries saddled with the responsibility of monitoring and responding to diseases outbreaks keep tabs on mass gathering inventories. Furthermore, prior alerts and public health recommendations regarding outbreaks should be communicated to events organizers, such as crowd control, event call-off and suitable alternatives. Collectively, Africa and Africans must join forces together to create and launch a powerful and co-ordinated call to battle COVID-19 pandemic by establishing and enacting strict laws that prohibits mass gatherings and supports social physical distancing. Regrettably, and the temporary ban on mass gatherings (MGs) may appear so traumatic and horrifying for all of us, however, a thorough look at the known character of the novel SARS-CoV-2 virus and its several mysteries yet to unfold, leaves us with little or no choice. We therefore recommend that every African citizen should endeavour to help the respective government in their country by cooperating with any stated directives and guidelines, and also avoiding gatherings that pose a high risk of person-to-person contacts, as failure to do these may slide the present pandemic into a continental catastrophe.

Conflict of interest statement

The authors declare that there are no conflict of interest.

REFERENCES

- 1. WHO. Rolling update on coronavirus disease (COVID-19). 2020. Available from: https://www.who.int/emergencies/ (Accessed on April 28, 2020).
- 2. John Hopkins University & Medicine. Coronavirus Resource Center. COVID-19 Case Tracker. 2020. Available from: https://www.coronavirus.jhu.edu/map.html (Accessed on May 8, 2020).
- 3. Rocklöv J, Sjödin H. High population densities catalyze the spread of COVID-19. *J Travel Med* 2020; 27(3):taaa038.
- 4. WHO. Q&A on mass gatherings and COVID-19. 2020. Available from: https://www.who.int/news-room/q-a-detail/q-aon-mass-gatherings-and-covid-19 (Accessed on April 14, 2020).
- 5. Ebrahim SH, Ahmed QA, Gozzer E, Schlagenhauf P, Memish ZA. Covid-19 and community mitigation strategies in a pandemic. *BMJ* 2020; 368: m1066

- WHO. Novel Coronavirus (2019-nCoV) Situation Report – 3. 2020. Available from: https://www.who.int/docs/defaultsource/coronaviruse/situationreports/20200123-sitrep-3-2019ncov.pdf?sfvrsn=d6d23643_8 (Accessed on May 5, 2020).
- 7. Chia T, Oyeniran OI. Human health versus human rights: An emerging ethical dilemma arising from coronavirus disease pandemic. Ethics Med Public Health 2020; 14: 100511.
- Chia T, Oyeniran OI. Will Africa experience a spike in COVID-19 cases? Asian Pac J Trop Med. 2020; 13(7): 285-287.
- Oyeniran OI, Chia T. Novel Coronavirus disease 2019 (COVID-19) outbreak in Nigeria: how effective are government interventions? Ethics Med Public Health. 2020; April 29. doi: 10.1016/j.jemep.2020.100515. [Epub ahead of print].
- 10. Oraebosi MI, Chia T, Oyeniran OI. Preparing the Next Generation of African Healthcare Workers and Scientists: Lessons from Coronavirus Pandemic. Ethics Med Public 2020: Health. May 27. doi: 10.1016/j.jemep.2020.100535. [Epub ahead of print].
- 11. World Population Review. Best Healthcare in the World Population. 2020. Available from: https://worldpopulationreview.com/countries/b est-healthcare-in-the-world/ (Accessed on May 5, 2020).

- 12. WHO. World Bank and WHO: Half the world lacks access to essential health services, 100 million still pushed into extreme poverty because of health expenses. 2017. Available from: https://www.who.int/newsroom/detail/13-12-2017-world-bank-and-whohalf-the-world-lacks-access-to-essentialhealth-services-100-million-still-pushed-intoextreme-poverty-because-of-health-expenses (Accessed on April 30, 2020).
- 13.Musa SS, Zhao S, Wang MH, Habib AG, Mustapha UT, He D. Estimation of exponential growth rate and basic reproduction number of the coronavirus disease 2019 (COVID-19) in Africa.. BMC Infect Dis 2020. doi: 10.21203/rs.3.rs-19916/v1. [Epub ahead of print].
- 14.WHO. Modes of transmission of the virus causing COVID-19: implications for IPC precaution recommendations. 2020. Available from: https://www.who.int/newsroom/commentaries/detail/modes-oftransmission-of-virus-causing-covid-19implications-for-ipc-precautionrecommendations (Accessed on April 20, 2020).
- 15. Wilder-Smith A, Freedman DO. Isolation, quarantine, social distancing and community containment: pivotal role for old-style public health measures in the novel coronavirus (2019nCoV) outbreak. J Trav Med 2020; 27(2): taaa020.