

## Identifying Factors Associated with Pandemic Risk Reduction, Especially During Further emergence of SARS-Cov-2 Omicron Variant On Malawi Perspective

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### Abstract

In 2019, around December; Coronavirus disease, shortened as COVID-19, was reported in Wuhan (China) as a respiratory disease. It was also discovered that; Covid-19 is an infectious disease caused by the SARS-CoV-2 virus. As COVID-19 Virus spread globally at a faster rate, World Health Organization (WHO) declared it as a worldwide pandemic. Though it was in more than 200 countries in the world, as of 31st March 2019 Malawi was among the countries that had not registered any case. Looking at its economic, political, and health status, the authorities recommended to strengthen more preventive measures to prevent the pandemic from entering Malawi. However, on 2nd April 2020; the first 3 Covid-19 cases were confirmed in Malawi. Worse still, in Africa, on 24th November 2021, the first case of Covid -19 Omicron Variant (an updated version of covid-19) was announced by South Africa, with the first positive sample dating back to 9th November 2021. We reviewed the current factors responsible for the pandemic risk reduction, especially during the further emergence of the current SARS-Cov-2 Omicron Variant in Malawi, and discussed potential prevention and mitigation techniques.

**Keywords:** COVID-19, Omicron Variant, Malawi Health System, Corona Virus, Pandemic.

### Background

In Wuhan, Hubei Province (China), the first case of a new lung attack of coronavirus known as COVID-19 was registered on 31 December 2019, [1, 2]. This is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV2). This is symptomized by cough, fever, and shortness of breath [3]. COVID-19 is a kind of zoonotic pathogen, ably transmitted among mammals. The World Health Organization (WHO) declared COVID-19 a global pandemic on March 11, 2020; since then, COVID-19 cases have increased fast, with 697,244 confirmed cases and 33,257 fatalities in more than 200 counties as of March 30, 2020 [4]. There was a total of 264,620,385 cases and 702,101 new cases as of 2nd December 2021, according to world meter.

Since it's a global pandemic, many countries took necessary measures to prevent and control covid-19. This was also done to reduce the mortality rate and other negative impacts to Small and Developing Enterprises (SDEs) and economies at large [5]. The virus caused unprecedented challenges in all sectors of development within and beyond the borders of economies. As of 3rd December 2021, almost every country, globally, registered cases of COVID-19 and one of them was Malawi [6]. Worse, still, Dr.

Angelique Coetzee, leader of the South African Medical grouping and member of the Ministerial Advisory Team on Vaccines, discovered a novel Covid-19 Omicron Variant in South Africa on 24 November, 2021 [6]. She had observed numerous patients having various symptoms from the prevalent Delta variation, such as acute weariness, body pains, and headaches, with no significant decline in oxygen levels with the new version now. This review therefore focuses on identifying factors that are associated with reducing pandemic risks especially with the continued emergence of SARS-Cov-2 Omicron Variant On Malawi.

### Current Status In Malawi

Malawi is a landlocked country, located in the southern part of Africa. It shares borders with Mozambique in the southern part, Zambia in the western part, and Tanzania in the northern part [7]. It has a total population of about 19,821,205 as of Saturday, November 27, 2021, based on Worldometer. Elaboration of the latest United Nations data, indicates that, it has GDP of 12.15 billion USD representing 0.01 of the world's total GDP. This ranked it as one of the poor countries in the world [8]. Malawi has citizens who stay in South Africa (a country pronounced of Omicron Variant). Its people travel direct from South Africa to Malawi especially festive

season. The risk is high and that there is a lot of speculations about the Omicron virus in Malawi. Many people are leaving with fear and anxiety, like what happened with COVID-19.

It therefore, makes sense that regardless that the COVID-19 Omicron has not yet spread around Malawi, the government must put in place all the necessary additional measures that will help in the prevention of the pandemic [9]. On December 10th 2021, three cases of Omicron variant were confirmed in the country. The government tightened measures at all points of entry into the country [9]. The Ministry of health intensified the screening of travelers at all points of entry to prevent importation of COVID-19 cases. As of December 24, 2021, Malawi recorded a total of 68,470 cases including 2,319 deaths since the first COVID-19 cases were reported in the country in April 2020 [3].

### **Malawi Health System Status**

The Ministry of Health (MOH) is the pivotal of the Malawi health system. It is responsible for all health related matters in the Country. The health services are provided to the public under MOH and the private sector [10]. It is grouped as those specifically aimed at profit making and those not specifically aimed at profit making like mission hospitals and other non profit making organizations. The four main Central hospitals in Malawi that operate at high referral levels are Queen Elizabeth Central Hospital in the south, Kamuzu Central Hospital in the capital city, Zomba Central hospital in the eastern region and Mzuzu Central Hospital in the northern, where there is high expertise and specialists' attentions. Then, there are District hospitals in each and every district that also has some level of referral at district level; then, health Centers; dispensaries and other village clinics that attend to minor ailments. For the past years, Malawi has faced some other epidemics and pandemics.

It is still fighting diseases like Cholera and HIV/AIDS. Despite this experience, COVID-19 is another kind of the pandemic that has seen the world's super-power economies with improved and high rated medical healthy systems, struggling to prevent and control the spread of the virus. Some of the challenges include running out of the testing materials, masks, ventilators and other essential medical equipment. Therefore, Necessary arrangements must be done in preparing the healthy system to avoid the further spread of the virus in the country. The financial and material support of testing kits and other medical accessories by the foreign entities like Alibaba foundation to all African countries, also boosted Malawi's medical equipment which is currently not sufficient, though the usage of the funds by authorities stand to be challenged.

### **Malawi's Political Status and the Spread of Covid -19 Variant**

Previously, in 2019, the High court sitting as Constitutional court in Malawi nullified the presidential elections, which was followed by frequent demonstrations across the country led by the Human Rights Defenders Coalition (HRDC), between 2019 and 2020 pending the fresh elections which were held on 23 June 2020; where the government changed from Democratic Progressive Party (DPP) to Malawi Congress Party (MCP) (Lazarus et al., 2020).

Up on Malawi Electoral Commission (MEC) announcing the cal-

endar for the re-elections of presidents, voters were expected to go into the polls by July 2019, but with the outbreak of COVID-19, the future was in dilemma as nobody knew as to when the pandemic would have ended or slowed. Regardless of this situation, leaders were encouraged by the World Health Organisation (WHO) to enforce preventive and control measures in a bid to protect their citizens. One of it was lockdown which proved to be a working measure for many countries. By then, Malawi was already declared a state of disaster by the then leader in order to protect its citizen from the virus. Subsequently, in 2021, the previous party DPP brought to court an electoral case for unfairly constituted Commissioners of the Malawi Electoral Commission as declared by the incumbent president, where it sought a re-run. The Malawi Court dismissed presidential elections challenge on 27th November, 2021.

The country would have been in another dilemma of going for voting if the court had ruled in favor of the opposition amidst the 3rd wave of covid -19 and the anticipated 4th wave/ Omicron Variant. Additionally, currently, there is a sequence of demonstrations taking place in some parts of the country against rapid increase of prices for basic commodities, tollgate fees, nepotism, increased fraud and other day to day challenges being linked to political failure by the current government being led by the former Member of Parliament and Human Rights Activist and colleagues [11]. The wowing together of citizens for demonstrations may foster further spread of COVID-19 Omicron variant.

### **Economic Status and Small & Developing Enterprises (SDEs)**

Due to Malawi's political instability and COVID-19 prevalent, the country's economy has been negatively affected as many businesses, especially small and developing ones (large in numbers) keep on being disturbed by demonstrations.

In the same lane, COVID-19 impacts have not only affected major economies, as a landlocked country, Malawi has also been affected as most of its raw materials for production are imported from other countries. The prevalence of COVID-19 affected production of goods. Eventually the small and Developing Enterprises suffered which led to incapacitation of the economy at large [12]. That's even the buyers might be challenged to purchase basic or luxurious merchandise, thereby disabling the Small and Developing Enterprises in Malawi, who are in majority because of the presence of the Omicron Variant.

### **Current Status of other African Countries**

As at 31 March 2020, 40 countries out of 47 Countries in Africa had registered with COVID-19 cases, registering 3786 confirmed cases and 77 deaths in total [11]. With the guidance of the WHO almost all their countries in Africa responded to the calls and advises given by the WHO by starting to restricting and crossing all the land borders, sea and flights entries into and outside the countries and only allowing essential activities to be transported. Furthermore, for example some countries like Tanzania, Algeria, Djibouti, Kenya, Morocco, Zambia, etc. took restriction measures on public gatherings and internal travelling too, while some countries like Rwanda and South Africa had taken further measures on lockdown [13].

South Africa was the leading country with highest confirmed number of cases in Africa, the full lockdown had made South Africa and Rwanda to be among the African Countries which joined other countries outside Africa like India, China, France, Italy, New Zealand, Spain, USA and Poland. It looks that there was great coordination between the WHO and countries as the countries had shown much effort in combating this deadly pandemic by following the WHO measures [14]. South Africa is the first known country with Covid-19 Omicron, but there are believes that it is also in the continents but not yet discovered [15]. The occurrence of the Omicron type was recorded in 22 African nations as of December 23, 2021. According to the Africa CDC, six African nations have recorded Omicron COVID-19 variant cases: Burkina Faso, Togo, Egypt, Kenya, Morocco, and Mauritius [16]. The African Union (AU) has cautioned that travel and entrance prohibitions imposed in response to the development of the Omicron COVID-19 variant restrict free movement of people and products, bearing immediate and serious consequences on African countries [16].

The number of verified COVID-19 cases in Africa had reached 9,259,813 as of December 23, 2021, with a mortality toll of 226,536 [17]. WHO indicated that, given the mutations that may confer immune escape potential and possibly transmissibility advantage, the likelihood of potential further spread of Omicron at the global level is high [17].

### **Covid -19 Response Policy Intentions**

In a bid to addressing the health and socio-economic areas as a result of the COVID-19 pandemic, the Government of Malawi used a number of sectors, which successfully increased number of testing capacity [18]. There were some complexities like the resistance to some policy acceptance and other unintended consequences, like the resistance to complete lockdown by citizens [19]. Some un intended consequences included the introduction of remote learning to public education.

This, consequently, led to increased teenage pregnancies during the school closure period. Records indicate that Overall, 4.3 percent of students in Malawi dropped out of school between the period of February 2020 and March 2021, compared with a rate of 1.2 to 1.3 percent from the previous academic period [20]. The policy also need to reflect on the proper distribution of COVID19 funds to business citizens and cution the impacts of lockdown, which was not successful. Consequently, most recipients were not business people as intended, who could use the funds for luxury purchases like smart phones [21]. This happened amidst shortage of oxygen cylinders in hospitals for COVID-19 patients who were supposed to be priority beneficiaries. Therefore, Identifying Factors Associated with Pandemic Risk Reduction, Especially During Further emergence of SARS-Cov-2 Omicron Variant On Malawi Perspective and analyzing of the same would help to prevent all the above un intended consequences.

### **Malawi's Pandemic Risk Reduction Steps**

The government of Malawi so far has implemented some recommendable steps which have been followed. Firstly, there is an appointment of Special Cabinet Committee on Corona virus. This started its operations on 7th March 2020 with an aim of providing a policy guidance and looking at all top-level matters concerning

the COVID-19 pandemic [22]. It is also expected to take into account the measures against Omicron Variant. It further announced the country as a state of disaster on March 21, 2020.

Throughout the country, they banned street vending, public gatherings including religious gatherings, wedding ceremony, pubs and any other kind of grouping which can lead to the spread of the virus. On 23rd March 2020 the Ministry of Education announced closure of all schools, colleges in both public and private sector in order to combat the COVID-19 pandemic. However, there was resistance to a complete lockdown [19]. This means there is need for epidemic response policies to be supported by public health laws, hence mitigating both direct and indirect impacts of COVID-19 Omicron in Malawi and other countries in Africa. This might be the case, if the public won't take necessary procedures to avoid the coming in of Omicron Variant and the economy would worsen, with a bigger impact to the Small and Developing Enterprises (SDEs).

Up on announcement of the state of emergency, just like other African countries affected by COVID-19, Malawi government had also closed its borders and seriously controlled air flights [6]. Special announcement was made by the Presidential Task Force on COVID-19 to suspend all international flights which were scheduled to start from 1 April 2020 [6]. The allowance was only given to transportation of goods and services that are paramount to the country. People have been also communicated on the prevention and control measures like the use of masks when in crowded places, social distancing and other preventative measures. Combating the COVID-19 Omicron is a challenging task to all the countries affected due to its mode of transmission, the rate at which cases and mortality rate are increasing each and every day in the whole world [1].

Malawi therefore can learn to improve on its current measures upon looking at examples of other developing economies on the way they are preventing and controlling the virus and the way they are struggling to control it. Furthermore, though there is limited number of testing kits, but it's recommended to review the ways of screening COVID-19 Omicron approach and testing of population that may have any symptoms at large in order to fully be assured that we don't have any case and to properly prepare as new cases might be reported forthwith [9]. Additional measures have been put by the ministry of health in Malawi against COVID-19 Omicron variant. For example, the Ministry of Health has enhanced screening of travelers at all points of entry to prevent the further importation of COVID-19 omicron cases, imposing additional restrictions in addition to the existing requirement that travelers arriving in the country have a negative PCR-based COVID-19 certificate issued within 72 hours of arrival [6].

Among other things, at the point of entry, all incoming travelers of all nations, including Malawians, are required to display a valid, electronically verified COVID-19 complete vaccination certificate. Arriving visitors who fail to show an electronically verifiable certificate at the boarder will be asked to have the COVID-19 vaccination, which will be provided free of charge at the border, before being assisted to enter or re-enter the country. Travelers who are unable to present a valid electronically verified COVID-19 cer-

tificate and refuse to accept the COVID-19 vaccination supplied at the boarder will be obliged to undergo mandatory quarantine for signs and symptoms monitoring for a period of not less than 10 days, this would be done at the traveler's own expense [23]. The health minister also urged that organizational Christmas celebrations be cancelled in an effort to protect personnel [24].

## Conclusion

Pandemic risk reduction requires concerted efforts for economies to succeed. COVID-19 Omicron as global pandemic has brought another fear and panic to citizens and yet a huge negative impact to all the sectors of economies within and outside country borders, especially businesses that are just starting and developing. Malawi as one of developing nations, should therefore improve and continue with the implementation of the current measures of encouraging citizens to mask up when in crowded places, social distancing, vaccination and serious restrictions at its borders to contain the pandemic. Therefore, prevention would be the best way for Malawi to avoid increased number of imported cases. Through working together, each citizen taking their part by following all the WHO and Malawian measures that are put in place, it is believed that this pandemic will be fought and we will eventually succeed.

## References

1. Lee, A. "Wuhan novel coronavirus (COVID-19): why global control is challenging?." *Public health* 179 (2020): A1.
2. Peter, S. N., & pandey, D. (2020). Current Advancements on the Efficacy of Convalescent Plasma as a Potential Promising Treatment for Covid-19. *Asian Journal of Advances in Medical Science*, 7-12.
3. Munthali, G. N. C., & Xuelian, W. (2020). Covid-19 Outbreak on Malawi Perspective. *Electron J Gen Med*. 2020; 17 (4): em210.
4. Organización Mundial de la Salud. (2020). Covid19 Coronavirus Disease 2019. In *DroneEmprit* (Vol. 2019, Issue March, pp. 1–19).
5. Liu, X., Zhang, J., & Guo, C. (2013). Full-text citation analysis: A new method to enhance scholarly networks. *Journal of the American Society for Information Science and Technology*, 64(9), 1852-1863.
6. Mzumara, G. W., Chawani, M., Sakala, M., Mwandira, L., Phiri, E., Milanzi, E., ... & Squire, B. (2021). The health policy response to COVID-19 in Malawi. *BMJ global health*, 6(5), e006035.
7. Mucavele, F. G. (2013). True contribution of agriculture to economic growth and poverty reduction: Malawi, Mozambique and Zambia synthesis report. 1-13.
8. The, I. N., Of, C., & At, S. (2020). Republic of malawi in the supreme court of appeal sitting at lilongwe professor arthur peter mutharika ...1 st appellant the electoral commission ... 2 nd appellant and dr . Lazarus mccarthy chakwera.
9. Burki, T. K. (2021). News Omicron variant and booster COVID-19 vaccines. *The Lancet Respiratory*, (21), 2600.
10. Makwero, M. T. (2018). Delivery of primary health care in Malawi. *African Journal of Primary Health Care and Family Medicine*, 10(1), 1-3.
11. Situation Report-71 HIGHLIGHTS. (n.d.).
12. Brief and Priority Actions for Member States. (2021). 2021(November), 1–8.
13. Liu, J., Liao, X., Qian, S., Yuan, J., Wang, F., Liu, Y., ... & Zhang, Z. (2020). Community transmission of severe acute respiratory syndrome coronavirus 2, Shenzhen, China, 2020. *Emerging infectious diseases*, 26(6), 1320.
14. Pandey, D., Gul, R., Canete, J. J. O., Rocha, I. A. N. C. N., Gowwrii, G., Pandey, B. K., & Peter, S. D. N. (2021). Mental Stress in Online Learning During the Pandemic : an Assessment of Learners ' Perception. 6(3), 37–49.
15. Karim, S. S. A., & Karim, Q. A. (2021). Omicron SARS-CoV-2 variant: a new chapter in the COVID-19 pandemic. *The Lancet*, 398(10317), 2126–2128.
16. Omicron spreads but severe cases remain low in South Africa | WHO | Regional Office for Africa. (n.d.).
17. Coronavirus (COVID-19) | WHO | Regional Office for Africa. (n.d.).
18. Munharo, S., Nayupe, S., Mbulaje, P., Patel, P., Banda, C., Gacutno, K. J. A., ... & Lucero-Prisno III, D. E. (2020). Challenges of COVID-19 testing in low-middle income countries (LMICs): the case of Malawi. *Journal of Laboratory and Precision Medicine*, 5(10.21037).
19. Transition, D., & Media, S. (2022). LOCK DOWN REJECTED (MALAWI).
20. Kadzamira, E., Mazalale, J., Meke, E., Mwale, I. V., Jimu, F., Moscoviz, L., & Rossiter, J. (2021). What Happened to Student Participation After Two Rounds of School Closures in Malawi — and How Have Schools Responded ? March. Issued on 29 th April 2021 , Lilongwe Malawi. (n.d.). 1–3.
21. Sambala, E. Z., & Manderson, L. (2017). Policy perspectives on post pandemic influenza vaccination in Ghana and Malawi. *BMC Public Health*, 17(1), 1-13.
22. Document, B. I. (2020). Malawi Fifth Integrated Household Survey ( IHS5 ).
23. Report, S. (2021). 36,126. June.

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