

Letter to the Editor

Community use of masks as a preventive measure for Covid-19 in Kabale district of Uganda

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Abstract

Coronavirus disease 2019 (Covid-19) caused a global pandemic and by June 1st, 2020, the global numbers of Covid-19 cases reached six million with more than 370,000 deaths. Community-wide mask wearing may contribute to the control of Covid-19 by reducing the amount of emission of infected saliva and respiratory droplets from persons with subclinical or mild Covid-19. However, use of masks in public and in health care facilities has been controversial as different organizations and agencies established different guidelines. In Uganda, not any reports on mask utilization practices have been published yet. Therefore, this report aims at documenting mask use practices, as observed in our interactions with non-Covid-19 patients and their relatives at Kabale regional referral hospital as well as Kabale town residents. It was observed that many non-Covid-19 patients and the relatives of hospitalized patients only wear their masks on reaching the hospital premises while community members of Kabale town wear their masks only in the presence of security agencies and individuals in the public only wear masks in places where they would be refused from services without masks. Wearing of masks in public places and health care facilities together with other preventive measures including hand hygiene, social distancing and wearing of full personal protective equipment for health care providers working on Covid-19 patients are key measures in preventing the spread of infection. There is an increased need for intensified community educational activities on public awareness of the importance of appropriate use of masks.

Keywords: COVID-19; pandemics; prevention and control.

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In December 2019, a novel coronavirus (SARS-CoV-2) emerged in Wuhan, China, sparking an epidemic of acute respiratory syndrome termed as coronavirus disease 2019 (Covid-19) in humans.¹ It was closely associated to bat borne SARS related coronaviruses and was the second pandemic to be recorded in the 21st century following the influenza A H1N1 pandemic of 2009.^{2,3} In a period of three months, the virus spread to more than 118,000 individuals and caused 4,291 deaths in

114 countries, hence was declared to be a global pandemic.⁴

By June 1st, 2020, the global numbers of Covid-19 cases reached six million with more than 370,000 deaths while Uganda reported 417 cases.^{5,6} The pandemic led to the implementation of proactive infection control measures in hospital settings to prevent rapid spread of the virus.⁷ In addition, public health interventions including border control, quarantine and testing of all incoming travelers or returnees, wearing of face masks, frequent hand hygiene, and social distancing measures were taken by different countries to

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reduce the risk of community transmission.⁸ On March 21st, 2020, the first case of Covid-19 was confirmed in Uganda, that was a 36-year-old man who had travelled to Dubai on March 17th, 2020.⁹ Ever since the index case was identified, there has been a gradual increase in the number of Covid-19 cases in the country most of which are imported cases mainly through travelers and truck drivers.^{10,11} Following the increase in numbers of Covid-19 in the country, the head of the state put forward various strategies in order to curb community transmission of the virus.⁶ These included closure of schools, country lockdown, social distancing rules, hand washing and the use of face masks for the essential workers such as health workers.¹² However, as the lockdown is being eased amidst raising number of cases within the population, the president of Uganda, with guidance of the ministry of health, made it mandatory to wear masks while in public and punishable by law if not used.¹³ In many countries, public wearing of masks has been considered as one of the key preventative measures of Covid-19 transmission.^{14,15} Community-wide mask wearing may contribute to the control of Covid-19 by reducing the amount of emission of infected saliva and respiratory droplets from persons with subclinical or mild Covid-19.^{16,17} However, use of masks in public and in health care facilities has been controversial as different organizations and agencies established different guidelines.¹⁸ The World Health Organization recommends surgical masks for health workers providing routine care to coronavirus disease patients, whereas the US Centers for Disease Control and Prevention recommend N95 respirators.^{19,20} In their review of 172 observational studies, Chu et al. analyzed 44 comparative studies on evidence obtained from SARS, MERS, Covid-19 and on beta coronaviruses causing these diseases and reported that the use of masks prevented infection.¹⁵ The respiratory mask has been found to reduce the risk of transmission by 67%, and the N95 mask by 96% in healthcare professionals. In total, the use of masks reduced the risk of infection by 85%. In addition, eye protection was found to reduce the risk of infection by 78%. Infections in healthcare workers can result in not only deaths, but also the quarantine of many healthcare professionals which can lead to outbreaks in hospitals and to disruption in the health system. Most authorities recommend that there's no need

for the community members to wear a mask, and that masks should only be worn by sick patients.¹⁵ On the other hand, evidence suggest that, if wearers are compliant to the standard precautions of wearing masks, the use of masks provide protection in high transmission settings such as the public and health care settings, and are more effective if used early when combined with hand hygiene.^{17,21-24} Hence, it is necessary to wear masks in high transmission settings; such as workplaces, busses, trains, planes and other closed settings.^{18,15} In Uganda, not any reports on mask utilization practices have been published yet. Therefore, this report aims at documenting mask use practices, as observed in our interactions with non-Covid-19 patients and their relatives at Kabale regional referral hospital as well as Kabale town residents. It was observed that many non-Covid-19 patients and the relatives of hospitalized patients only wear their masks on reaching the hospital premises and wearing them off as soon as they leave the hospital gates. This behavior has been considered as a result of implementing guidelines of hospital Covid-19 task force which only allows individuals with face masks to enter the hospital gates to access health services.

Furthermore, it was observed that community members of Kabale town wear their masks in the presence of security agencies who may intercept their movements as security officers follow the directives of the president.¹³ Additionally, individuals in the public only wear masks in places where they would be refused from services without masks and remove them as soon as they leave such facilities such as banks, supermarkets, markets and public offices.

In conclusion, wearing of masks in public places and health care facilities together with other preventive measures including hand hygiene, social distancing and wearing of full personal protective equipment for health care providers working on Covid-19 patients are key measures in preventing the spread of infection.^{17,19,22,25} Despite the known benefits of wearing face masks, individuals in Kabale town, Kabale district of Uganda seem to wear masks to please health workers at Kabale regional referral hospital and security officers at different points where they encounter with them. More comprehensive studies are necessary to explore the utilization practices regarding the use of face masks, perceptions and contributory factors in Kabale community. This report also highlights the increased need for the Ugandan ministry of health

and partner organizations to intensify community educational activities on public awareness of the importance of appropriate use of masks. These include both urban and rural communities who may not have access to radio and televisions since most of the current preventive measures on Covid-19 are aired or televised. This may help communities embrace behavioral changes having arisen due to the Covid-19 pandemic.

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Author Contributions:

Mustafa Ssaka: Literature search, data collection, data analysis, manuscript writing, final approval of the version to be published, agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Tunc Eren: Literature search, data collection, data analysis, manuscript writing, manuscript editing, critical revision, final approval of the version to be published, agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved designation of the study and performed the research.

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