



Universal Use of Facemasks Against Coronavirus Disease-19 in Nigeria: A Necessity or an Overreaction?

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Abstract

The upsurge of cases of coronavirus disease-19 (COVID-19) worldwide has compelled many countries including Nigeria to recommend mandatory use of facemask to their citizen in public places to limit the spread of this virus. Although to date, there is no documented evidence that facemask use by the public protected healthy people against COVID-19. Nevertheless, the World Health Organization encourages the general public to wear a non-medical mask in public settings in areas of community transmission. This paper reports on the current mandatory use of facemask by the Nigerian public and highlights the implications of such use.

Keywords: COVID-19, Hand Hygiene, Health Personnel, Masks, Nigeria, Pandemic, Public Health

1. Context

The coronavirus disease (COVID-19) is primarily a respiratory disease caused by a novel strain of coronavirus that emerged in 2019. The first case of this virus was reported in Wuhan city of China on 31 December 2019 (1). In Nigeria, the first COVID-19 case was reported in Lagos state on 27 February 2020 (2). The index case is an Italian man who works in Nigeria and returned from Milan to Lagos on 25 February 2020 (2).

The infectious nature of this virus compelled the World Health Organization (WHO) to declare COVID-19 a global public health emergency on 30 January 2020 and a pandemic on 11 March 2020 (3, 4). The incubation period of this virus ranges from 2 - 14 days (5). The common signs and symptoms are fever, cough, and tiredness (5). Other symptoms include a loss of taste or smell, shortness of breath or difficulty breathing, muscle aches, chills, sore throat, runny nose, headache, chest pain among others (5). The virus is mainly transmitted through respiratory droplets (that are ejected when speaking, coughing, or sneezing), and contact routes (6, 7).

Since the outbreak of this disease in Wuhan, it has spread to 188 countries/regions as of July 16, 2020, resulting in 13,589,273 confirmed cases, and 584,990 deaths worldwide (8).

2. COVID-19 and Non-Pharmaceutical Intervention (Facemask Use by the General Public)

Facemasks are made of different materials and designs (9) which influences their filtering capability and efficacy. Two types of facemasks are medical masks (surgical mask and N-95 respirator) and non-medical mask (cloth mask). A surgical mask is a disposable barrier device that is loosely worn over the mouth and nose against any potential contaminants in the immediate environment. If appropriately worn, guards against the large-particles droplets, splashes, sprays, or splatter from an individual's cough or sneeze that may contain COVID-19. It may also help to reduce exposure of the wearer saliva and respiratory secretions to others.

The N-95 respirator is a tightly fitted facial protective device that is capable of filtering airborne particles efficiently. It filters out 95 percent or more of the smallest particles in the air, but they have to fit just right in order to work efficiently. The WHO currently recommends that medical mask should be reserved for healthcare personnel, people with symptoms of COVID-19 infection, caregivers, or those sharing living room with persons suspected of having COVID-19 infection (6).

Cloth mask is made of other materials which may be tightly woven cotton fabric, such as quilting fabric, cotton sheets, or T-shirt fabric with or without sewing, including using a bandana and coffee filter to create a face covering (10). In areas of community transmission WHO en-

courages the general public to wear non-medical masks in public settings (grocery stores, at work, social gatherings, closed settings, including schools, churches, mosques, etc) (6). Similarly, the United States' Center for Disease Control (CDC) recommends wearing a cloth facemask in public places (grocery stores and pharmacies) where physical distancing is difficult to achieve (10). Consistent with these guidelines, the Nigerian Centre for Disease Control recommends the use of cloth facemask to the general public, especially when going to crowded places such as markets, shops, and pharmacies among other places in addition to compulsory preventive measures such as social and physical distancing, hand hygiene, and other non-pharmaceutical measures (11).

From the foregoing, one may ask, is facemask use by the public capable of preventing healthy people from contracting COVID-19? To date, there is no documented evidence that universal facemask use in the community protected healthy people against COVID-19 (6, 12, 13). Though, the absence of evidence is not evidence of absence.

3. COVID-19 and Non-Pharmaceutical Intervention (Facemasks Use by the General Public) Across the Globe

From global perspectives, most countries have mandated their citizens to use a facemask in public places in an effort to contain the spread of COVID-19. Austria, Bosnia and Herzegovina, China, Czech Republic, Hong Kong, South Korea, Japan, Thailand, Taiwan, Slovakia, the United States of America (USA), Germany, Indonesia, Israel, Morocco, Vietnam, Mongolia, and Canada are among the countries that have ordered/implemented mask use by the general population (14-29). Others are Argentina, Bahamas, Bahrain, Benin Republic, Bulgaria, Cameroun, Chile, Democratic Republic of Congo, Rwanda, Ecuador, Guinea, Honduras, India, Italy, Kenya, Liberia, Lithuania, Luxembourg, Mozambique, North Macedonia, Pakistan, Philippines, Poland, Turkey, Jamaica, Russia, Spain, Slovenia, Ukraine, Uzbekistan, and Zambia (30-57).

In line with the global trend, On 27 April 2020, the Nigerian government made the use of facemasks in public places mandatory for its citizens as one of the mitigation measures against the spread of COVID-19 in the country (58).

4. COVID-19 and Non-Pharmaceutical Intervention (Facemask Use by the General Public) in Nigeria

The transmission characteristics of COVID-19 made surgical facemask to become a hot and scarce commodity in Nigeria a few days after the index case was confirmed. As of

28 February, 2020 the cost of surgical facemask (a box of 50 masks) in the open market rose from about 700 Nigerian Naira (1.94 USD) to 25,000 Nigerian Naira (69.44 USD). Nigerians struggled to acquire surgical masks to protect themselves. The mismatch between demand and supply for this critical item due to panic buying and disruption in the supply chain worldwide during lockdown caused many pharmacies to run out of stock.

Prior to the mandatory facemask use in Nigeria, citizens voluntarily wear surgical masks outside their homes. However, overreaction by the population and the order that the general public should wear facemask caused acute shortages of surgical masks and hike in the price we are currently witnessing in our country. The scarcity of this item spurred some ingenious Nigerian tailors to start local manufacturing of cloth masks as an alternative in order to meet the rising demand.

5. The Implications of the Mandatory Facemask Use by the Nigerian General Public

The belief of most Nigerians that surgical mask is more effective than cloth mask also contributed to shortages and high cost of surgical masks. This has made them unavailable or out of the reach for those who genuinely need them such as frontline health workers, people with respiratory tract infections or those who have been confirmed to have the COVID-19 and their caregivers.

Apart from shortages of surgical masks and cost issues, a major concern of facemask use by the public is that it could create a false sense of security that may end up putting people at a greater risk of COVID-19 due to the tendency to abandon other preventive measures such as hand hygiene, social and physical distancing (6). Again, it may also lead to touching of the face under the masks and under the eyes with unwashed hands thereby increasing the chance of an individual contracting the virus (6). This highlights the need to enlighten the general public of which a majority is not educated on what mask to wear, when and how, and on the importance of continuing to strictly follow all other layers of preventive measures such as hand hygiene, physical and social distancing, and other non-pharmaceutical measures.

6. Conclusion

Despite the lack of evidence of reduced community transmission of COVID-19 with the use of facemask by apparently healthy people in the community, it is associated with uncertainties and unimaginable consequences. It

may take away the surgical masks from those that genuinely need them such as frontline health workers, people with respiratory tract infections, or who have been confirmed to have the COVID-19 and their caregivers. Again, it could create a false sense of security that may end up putting people at a greater risk of COVID-19. Therefore, decision-makers should enlighten the public on the appropriate use of masks and the importance of continuing to strictly follow all other layers of preventive measures.

Footnotes

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