

DEVELOPING ALTERNATIVE TEACHING CONTINUITY PLANS TO MOVE CLASSROOMS ONLINE AT COVID-19 ERA IN NIGERIA

CHAPTER NINE

UTILIZATION OF FACE MASK IN POST COVID-19 PANDEMIC AMONG HOME ECONOMICS STUDENTS AND STAFF IN HIGHER INSTITUTION IN LAGOS STATE

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Abstract

The novel corona virus, COVID 19 or SARS-COV-2 virus first emerged on December 2019 from Wuhan city China. In Nigeria, the first case was on the 27th of February 2020 from an Italian citizen returning from Milan to Lagos Nigeria. The world has witnessed 16, 055, 909 cases and 644,661 deaths. In Nigeria, 39,977 cases, 16,948 discharged and 856 deaths as at July 26th 2020. It is transmitted through aerosol or contact from droplets of infected persons. Incubation period is 5 to 6 days before symptoms appear. Some persons are symptomatic while others are asymptomatic hence the National centre for disease control (NCDC) and the World health organization (WHO) has emphasized the use of face mask which can be chosen from N95, FFP, 3M or fabric to flatten the curve of re-infection, so staff and students of Home Economics in higher institutions in Lagos state are inclusive. Considering that the Spanish flu of 1918 did not just disappear so quickly, however some people feel COVID-19 does not exist, not familiar with the different types of face mask, importance and care, face mask has become an item of fashion, also can be compared to safe driving and because of unhygienic behaviour such as sneezing, coughing, talking and sending out droplets from infected persons. In conclusion, wearing of face masks can be compared to safe driving and if every driver drives safely every road user will benefit therefore persons in higher institutions should wear face mask to prevent another outbreak, in post COVID 19. The following suggestions were made; social distancing guidelines should be maintained, constant disinfecting of campuses, lecture halls and laboratories, testing, tracing, tracking, isolation of members with symptoms, use of hand sanitizers, hand washing and the use of face masks to prevent infection or re-infected in post COVID-19.

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Introduction

The Novel Corona Virus officially referred to as COVID-19 or severe acute respiratory syndrome corona virus 2 (SARS-COV-2) first emerged on 31 December 2019 from pneumonia in Wuhan City China. In Nigeria, the Federal Ministry of health confirmed the first case on the 27th of February 202. The case was an Italian citizen who works in Nigeria and returned from Milan in Italy to Lagos on the 25th of February 2020 he was confirmed by the virology laboratory of the Lagos University teaching hospital, part of laboratory network of the NCDC (Nigeria centre for disease control) which has spread globally with 16,055,909 cases and 644,661 deaths and 39,977 cases and 16, 948 discharged, 856 deaths in Nigeria from the global index as of the July 26th 2020, time of writing this paper and still counting. The World Health Organization (W.H.O) declared the outbreak to be a public health emergency or international concern – PHEIC or Pandemic. It takes 5–6 days for symptoms of the virus to show from infected persons. However, it can take up to 14 days. People with mild symptoms of the virus who are otherwise healthy should manage their symptoms at home but immediate medical attention is needed for serious symptoms or calls the National Centre for Disease Control (NCDC) for help.

Some people are symptomatic (those with symptoms) while others are asymptomatic, (they are just carriers but without symptoms) but go to infect others without knowing. As a need of urgency and public health concern there should be mass testing extensively, rigorous contact tracing and strict isolation for both symptomatic and asymptomatic case to move ahead of this pandemic. A study by Liu, Sun and colleagues (2020) during this pandemic according to WHO shows that COVID-19 pandemic has the potential to increase stress and anxiety both because of the fear of infection and because of uncertainty about how the outbreak will affect people socially, economically and educationally. This is known as post-traumatic stress disorder (PTSD) which is a psychiatric disorder that can occur in people who have experience a traumatic event. Global data expects that the COVID –19 pandemic may cause high risk of infection, significant changes to daily living which will have a global and long-term effect across many regions in the world and Nigeria and Lagos State inclusive. Therefore, public health agencies, need to be able to address fall – out of the COVID-19 pandemic in higher institutions in Lagos state among staff and students of Home Economics even after the infection is under control.

Statement of the Problem

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Face mask which has become a symbol of this pandemic has not been given his “pride of place; by the general public in Lagos state as a means of potential prevention against this tiny deadly virus, some students and staff of Home Economics department feel COVID-19 does not exist, so staff and students of Home Economics in higher institutions in the state are not exceptions on the use of face masks. They are not aware that some people are asymptomatic while others are symptomatic therefore using face mask will help to lower the risk or spread of being infected or re-infected and also help to “flatten the curve” also they are not familiar with the different types of face mask available even for vulnerable individuals, besides, they are not aware that face masks must pass certain standards before it can serve the purpose it was meant for also that the face mask will become more effective when guidelines given by National Centre for Disease Control (NCDC) are followed for staff and students of Home Economics in higher institutions in Lagos State to remain safe from COVID-19 Virus re-infection or another virus attack in post COVID-19.

Purpose of the Study

The main purpose was the utilization of face mask in post COVID-19 pandemic among staff and students of Home Economics in higher institutions in Lagos state to reduce or the re-occurrence of the virus, the following objectives were state to:.

1. Explain the mode of transmission of COVID-19
2. Explain the different types of face mask available
3. State the important things to note about face mask in COVID-19
4. Importance of Face Mask among Home Economics Students and Staff in Higher Institutions in Lagos State in post COVID-19
5. Highlight rules for wearing face mask in post COVID-19 among staff and students in higher institutions in Lagos state.

Symptoms of COVID–19 Infections

Liu, Sun and colleagues (2020) noted that the symptom ranges from common to sever. They include:

1. Symptoms such as: Fever, Dry cough, Tiredness.
2. Less common symptoms are: Aches and pains, Sore throat, Diarrhea, Conjunctivitis, Headaches, Loss of taste and smell, A rash on shin or discoloration of fingers or toes.
3. Serious Symptoms: Difficulty in breathing or shortness of breath, Chest pain or pressure, Loss of Speech or movement.

Mode of Transmission of COVID–19

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There are two main types of transmission as observed by Ghose (2020), these are:

Aerosol Transmission: The virus that causes COVID – 19 spread known as the SAR – COV – 2 viruses, once it has infected someone the disease hijacks their cells to replicate itself. As it multiplies, these new virus particles then bust out of the cells and become suspended in the bodily fluid in the lungs, mouth and nose. When an infected person coughs, they can send showers of tiny droplets known as aerosols filled with the virus into the air. A single cough can produce up to 3,000 droplets. The larger droplets quickly settle onto nearby surfaces in disturbed air while smaller ones remain suspended in the air for hours where they can be breathed in. The droplets can be spread in air-conditioned rooms or through ventilation systems in buildings. Genetic material from SAR–COV–2 has also been detected in the air in toilets and rooms used by infected persons. These aerosol droplets can survive for at least three hours and for more than 16 hours after being suspended in aerosol droplets.

Contact Transmission

There are thousands of droplets invisible to the naked eyes by just uttering the word pandemic, or “stay home” or “stay safe”. In most cases the virus is commonly transmitted in indoor environment, particularly in people’s homes. What is true is that persons who have a member of their household, roommates, classmates who is infected with the virus have a higher probability of getting infected with COVID–19, than people without. Passing a person on the street at a distance of 6 feet, is likely to pose low risk of infection but chatting at a distance of 6 feet with the same person for a few hours is higher risk which shows contact transmission and if the viral particles emitted from infected individuals land on a surface, another person touches that object, then the virus will then sneak into the body through the mucous membranes infecting the second person. It is also transmitted in public transports, restaurants, cinemas, night clubs, churches, mosques, beaches and shops. Due to the mode of transmission face mask could help to reduce transmission in the community particularly public and crowded areas such as schools, places of worship, motor parks, markets.

Types of Face Masks

Shou, Chen, Mengzhen, Nan, Wei and Benjamin (2020) opined that the N95 respirator mask and the equivalent FFP – 2 respirator masks are recommended for front liners. These are designed to passively filter out 95% and 94% of airborne particles respectively to 0.3 micrometers as the wearer breaths and block the virus from entering. The virus that causes COVID-19 is 0.07 – 0.09 micrometers in size. Respiratory viruses however tend to be suspended in aerosol droplets which can range from 0.1 – 1 – 900 micrometers, so blocking these is often more important. This is why these masks are recommended for front line

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workers. This face piece respirator meets the US National Institute for occupational safety and health air filtration rating as it filters at least 95% of air borne particles. Zeynep, Jeremy and Trisha (2020) observed that there is the 3M surgical mask this is the type worn by surgeons in the operating theatre. It could keep out almost 75% of particles down to a size of 0.02 micrometers, catch bacteria shed in liquid droplets and aerosols from wearer's mouth, but not as effective as the N95 but still help to reduce the number of particles breathed in but if a hole is cut at the end of a stocking and wearing that over the mask will help to improve, the mask's ability to cut out particles to 90%. Rice (2020) noted that fabric masks can be made from bandana, wooden scarf, scarves, boo – tread, count pillow case folded four time could filter around 60% of the particles and clothes that cover the nose and mouth when using fabric create a pocket that has a filter of some kind to be placed in it, use a vacuum cleaner bag or add coffee filters between two bandanas or insert fold pillow cases to make it more effective. Using fabric with a higher thread count works better. Masks made from allergy – such as using air conditioning filters and vacuum clear bags work best almost matching the performance of an N95 respirator. Incorporating non – wooden materials like those used in some dust mops is effective also as well as adding nylon on top or clinch the mask onto the face will increase the effectiveness of being able to keep out 80% of the particles, pulling a t – shirt yank up over the nose and mouth will block less than half of the aerosols coming towards it, doubling or tripling layers of a cotton t- shirt fabric can dramatically improve things in an emergency, fabric such as silk, polyester, cotton, flannel, felted wool and quilted cotton are found to block ultrafine particles, a single sock when flat and pressed tightly against the nose and mouth could serve as good emergency mask substitute. Face shield are provided for use with strong acids in particular hydrofluoric acid and these must be worn but during this pandemic face shield are worn in hospitals by front liners and it has been incorporated into fabric mask. They provide additional protection not just for the eye but also for the whole face and neck, they also have the benefits of, stopping the user from touching their faces with contaminated hand or gloves and does not slip off the nose like safety glasses.

Important Things to Note about Face Mask in Post–COVID 19 among staff and students of Home Economics in Higher Institutions in Lagos State

Home Economics is concerned with food preparations, garment making nursery management and many other activities that has to do with body contact both theory and practical and since wearing masks can be compared to safe driving in that other road users and pedestrians benefit from safe driving and if all drive carefully, the risk of road traffic crashes is reduced therefore wearing of face mask involves every citizen, including students and staff of Home Economics in Higher Institutions of Lagos State. It has become a symbol of social solidarity in the global response to the pandemic and bring out

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meaningful reduction in the number of infected persons before vaccination is found. It is a symbol of the pandemic era a visual metaphor for the tiny unseen viral foe that could be lurking around the corner even wearing a damp homemade mask can reduce the number of droplets each people emit while they speak, it is important that students and staff of Home Economics in higher institutions in Lagos State wear mask to protect themselves and others from respiratory droplets especially because of possible a symptomatic transmission of, SARS – COV – 2 or COVID-19. Achembach, Lena, MCGinley (2020) noted that, making and using their own facemask cloth covering is a way to help “flatten the curve”, and to lower the risk that the wearer if infected would transmit the virus to other people, in the recent days, an assortment of scientists health experts, pundits and influencers has vigorously advanced their position that everyone venturing into public or crowded places should wear a mask or face shield even a homemade one to lower the rate of transmission of COVID-19, the disease caused by the corona virus, vulnerable individuals should avoid crowding area and use surgical face masks rationally when exposed to high – risks areas, as evidence suggests, COVID-19 could be transmitted before symptom onset, community transmission might be reduced if everyone, including people who have been infected but are asymptomatic and contagious wear face masks.

Adebayo (2020) opined that, medical professionals have warned that people with chronic asthma who are wearing face masks especially the surgical and clothing type are exposing themselves to hypoxia which is a condition in which the body is deprived of adequate oxygen supply at the tissue level except for social gathering, asthmatics may not necessarily need to wear face masks. When mask is worn it should not be for long because mask reduces oxygen supply to the brain after a period. Instead should opt for biodegradable masks like N95 or FFE series. Since both series are protected, improper use of face masks such as not changing disposable masks could jeopardize the protective effect and even increase the risk of infection. People in quarantine should wear mask especially when living home to prevent a symptomatic or pre-symptomatic transmission to vulnerable populations such as older adults and those with underlying medical conditions. Public education is needed to avoid stigmatization by also making wearing of mask compulsory

Importance of Face Mask among Home Economics Students and Staff in Higher Institutions in Lagos State in Post COVID-19

Alan (2020), Degroot (2020), Nina and Riley (2020) noted that pandemics do not go away so quickly even when the curve has flattened, considering the Spanish flu of 1918 that infected 500 million people and killed 50 million globally, it lasted from 1918-1920 but normal life did not return until 1922 globally. There were three waves or spikes or resurgence between 1918-1919 because people were in a hurry to open. There was no

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vaccine, control was limited to non-pharmaceutical interventions such as isolation, quarantine, crowd control, good personal hygiene, use of disinfectants and limitations of public gathering, wearing of face masks (Then, the mask was made from gauze) instituting mask laws, business-hour restrictions and the shutting down of schools, theatres, churches and dance halls, closing shops, restaurants, placing restrictions on transportation, mandating social distancing to flatten the curve and people were not observing these laws evenly. (Shuo 2020) History will repeat itself. So, as higher institutions are reopening the use of face masks and other guidelines should be maintained because it is a community of its own to avoid a spike until life returns to normal. The use of face mask has become the latest trend both as a fashion emblem and a medical item and will continue well after the pandemic even in schools. The World Health Organization (WHO) said only people with COVID-19 and those caring for them should wear mask. Face masks are widely used by medical workers as part of droplets precaution when caring for patients with respiratory infection but today it has become an unremarkable sight in streets and supermarkets, bought on-lines, homemade or from scarves, although it creates a false scene of security because it might lead to neglecting fundamental hygiene measures, such as proper hand hygiene. Apart from being used to shield the face, it has become one of the compulsory kits people across the country must use once leaving their homes. It plays an important role in places such as hospitals, public transportation and in crowded places such as schools. It is better to use facemask than risk contracting the virus. Mask wearing also serves as a remainder to the entire crisis that has happened and is trying to be good citizens by covering their mouths

Rules for Wearing Face Mask in Post COVID-19 in Higher Institutions in Lagos State
Adejoro (2020) and Omogbolagun (2020) gave the following rules

1. Create and wear masks by following the NCDC guidelines
2. Be careful not to touch the eyes, nose and mouth while wearing cloth face masks to prevent potential contamination
3. Wash hands thoroughly before pulling on the mask with soap and water or detergent
4. Remove the mask carefully and wash hands thoroughly after removing.
5. Wash the mask after each use.
6. Wearing the mask does not replace the need to continue. Frequent hand washing, avoiding touching the face and practicing social distancing to prevent the spread of illness.
7. Richard (2020) and Rice (2020) noted also that the wearer should continue to use typical systems and processes for cleaning toys, keeping sick children home, washing hands and other practices that are use every day, these actions help to keep the community healthy and safe.

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8. The mask should fit securely but not uncomfortably against the face.
9. Be secured with ties or ear loops to hold in place
10. Include multiple layers of fabrics
11. Allow for unrestricted breathing
12. Be launderable without damaging the material or changing the shape
13. Cloth masks do not provide adequate protection for others, if a staff member has symptoms compatible with COVID-19 all staff members should stay at home
14. To make the use of mask more effective social distancing of 3 to 6 feet should be used with hand washing with soap or detergent or use an alcoholic based hand sanitizer
15. Hot water, alone will not be enough to wash face mask because SARS-COV-2 virus or COVID-19 can survive temperature of at least 60c, fortunately the only envelope that encases corona viruses can be pulled apart by soap and house hold detergent.
16. Where social distancing measures are difficult to maintain such as small computer laboratories and confined library spaces on campus settings cloth face mask should be used
17. When mask is worn for a longtime oxygen is the blood is reduced as well as in the brain the wearer starts feeling weak and may lead to death
18. Use it in a crowded place and when in close contact with other persons.
19. Pull it off when you are alone and do not use it at home.

Conclusion

Wearing face mask can be compared to safe driving and if every driver drives safely, then every road user will benefit. Apart from this pandemic there are other infections that can occur due to mutation of the virus because of the unhygienic behaviours such as sneezing, coughing or talking and sending out droplets by unhealthy individuals. Other behaviour that can spike spread is hugging, singing, overcrowded lecture halls and hostels, unhygienic environment, etc. so the use of face mask should be used in addition to testing, tracing, tracking and hand washing before a vaccine is found. In view of these the following suggestions were made.

Suggestions

Face mask alone cannot accomplish the desired goal of stopping the spread or spike in second wave of COVID-19 in post COVID among Home Economics staff and students in higher institutions in Lagos State therefore the following suggestions were made:

1. Social distancing guideline should be maintained in Home Economics department, in lecture halls and in the laboratories by students and staff.

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2. Use of hand sanitizers to be made compulsory by the government and school management
3. Vigorous testing, tracing, tracking and strict isolation should be employed by NCDC and collage clinic staff
4. Health talk on COVID-19 should be given from time to time by NCDC staff and medical practitioners from the college clinic on campus to Home Economics staff and students.
5. Where possible on line lectures should be used by students and staff of Home Economics Department especially for theories
6. Lectures can be done in open spaces to avoid contact students and staff of Home Economics Department
7. Face mask to conform to recommended standards by NCDC for staff and students
8. Disinfecting the campus from time to time is important.
9. Regular cleaning of surface should be encouraged
10. Correct techniques for wearing removal and disposal of face masks should be done through public education.
11. All these can help reduce or stop the spike in second wave of COVID-19 before an effective Vaccine is found. Fabric face masks are recommended for staff and students of Home Economics because it is cost effective.

References

- Adebayo, F. F. (2020). Wearing face masks exposes asthmatics to hypoxia physicians. Sunday Punch Vol. 24, (20, 101) pg 24. Retrieved April, 2020. www.punchng.com.
- Adejoro, L. (2020). Fabric face masks offer least protection says pathologist Sunday Punch. Vol, 24, (20,098) pg 24. Retrieved April, 2020. www.punchng.com.
- Alan, M. (2020). COVID-19: The lessons we haven't learned from Spanish Flu pandemic. Four lessons fro webmd.com. Retrieved April, 2020.
- Degroot, G. (2020). COVID-19: The lessons we haven't learned from Spanish Flu of 1918. COVID-19: the Le—Japan-forward.com. Retrieved April, 2020.
- Ghose, T (2020) Who updates on Novel corona virus (COVID-19) who. Int/Maldives/news. details. update-on-novel-corona-virus- (COVID-19). who.int/Maldives.com. Retrieved April, 2020.
- Liu, Sun and colleagues (2020) Who updates on Novel corona virus (COVID-19) who.

DEVELOPING ALTERNATIVE TEACHING CONTINUITY PLANS TO MOVE CLASSROOMS ONLINE AT COVID-19 ERA IN NIGERIA

Int/Maldives/news.details.update-on-novel-corona-virus-(COVID-19).who.int/
Maldives.com. Retrieved April, 2020.

Masking recommendation for institute of Higher Education Corona Virus disease 2019,
Minnesota. health.state.mn.us. U.S. Retrieved April, 2020.

Nina S, & Riley, D.C. (2020). How some cities “flattened the curve” during the 1918 flu
pandemic. How they flattened ...national geographic Coronavirus coverage,
nationalgeographic.com Retrieved April, 2020.

Omogbolagun, T. (2020). Face masks; odd items, designs Nigerian and wearing to avoid
COVID-19. Vol, 24. (mo, to) Pg 24. Retrieved April, 2020. www.punchng.com.

Richard, G. (2020). Corona virus-what-is-the-best-kind-of-face-mask. Bbc.com/future
/article/20200504. Retrieved April, 2020. www.punchng.com.

Rice, K. (2020). Homemade face mask coverings. Nova health caring in action Kristine
Rice krice@novahealth.com Retrieved April, 2020. www.punchng.com.

Shuo, F., Chen, S.N., Mengzhen, F., Nan, X., Wei, S. & Benjamin, J.C. (2020). Rational
Use of face masks in the COVID-19 pandemic. Lancet Respiratory medicine.
Retrieved April, 2020. www.punchng.com.

Wearing face masks in the community during COVID-19 pandemic: altruism and solidarity
the lancet.com/journals/lancet/article/p1150140-6736(20)/3019-1/fulltext. Retrieved
April, 2020. www.punchng.com.

Protective clothing.Resources/Laboratory/Lab-manual/protective-clothing UCL
department of geography university college of London.geo.ucl.ac.uk/ Retrieved April,
2020. www.punchng.com.

What-is-ptsd-:psychiatry.org/ patients families/pstd/what-is-pstd. Retrieved April, 2020.
www.punchng.com.

Zeynep, J., Harward, J. & Greenhalgh, T. (2020). The real reason to wear a mask, the
Atlantic monthly group.theatlantic.com-d Retrieved April, 2020. www.punchng.com.