# COVID-19 AWARENESS AND INFLUENCE OF FACE MASKS ON COMMUNICATION AMONG DEAF STUDENTS OF EARLY CHILDHOOD EDUCATION DEPARTMENT, FEDERAL COLLEGE OF EDUCATION (SPECIAL) OYO, OYO STATE

#### Olatunji Saheed Olawale

Department of early childhood care and education School of Early ChildhoodCare, Primary, Adult and Non-formal Education Federal College of Education (Special), Oyo, Oyo state

olatunji.saheed1714@fcesoyo.edu.ng 08131371934

#### Adubuola Elizabeth Olaoluwa

Department of early childhood care and education School of Early ChildhoodCare, Primary, Adult and Non-formal Education Federal College of Education (Special), Oyo, Oyo state elizabethadubuola@gmail.com

08059501357

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#### Babarinde Adelayo Christian ah

Department of Education for Learners with Hearing Impairment School of Special Education Federal College of Education (Special), Oyo, Oyo state akinadeadelayo@gmail.com 08032188995

#### **Abstract**

The study focused on Covid – 19 awareness and the use and effects of facemasks on communication among Deaf students and sign language interpreters. The descriptive survey research design was adopted for the study while the sample for the study comprised thirteen deaf students of the early childhood education department of FCES Oyo. An interview schedule consisting of twelve questions was used for data collection. Data collected was analyzed using thematic approach. The result showed that majority of the deaf students were aware of Covid-19 existence. This awareness was obtained mainly from social media, online browsing, and one on one conversation, they believe that covid-19 is spread through physical

contact, non- observance of social distancing and non- use of facemasks, they also believe that use of facemasks, regular use of hand sanitizer and observing social distancing is the best preventive measure from covid-19 infection. The result further showed that deaf students do not like other deaf students and sign language interpreters using full covered facemasks during communication process because this practice makes it difficult to lip read the conveyor of message or instructions thereby leading to ineffective communication. Deaf students recommended that clear face masks and face shield should be used while maintaining physical distancing and the conveyor of messages or instruction should always use hand sanitizer. The researchers also recommended that government at all levels and NGOs should sponsor sign language interpreters to convey news and other educative programmes on TV stations, schools should employ capable hands that use manual signs very well and put a task force in place to make sure that students and staff maintain physical distancing while communicating.

**Keywords:** COVID-19, Pandemic Deafness, Facemasks Early Childhood Education, Precautionary Measures

#### Introduction

Normalcy is the quality of things being normal without any hiccup, challenge or problem. The state of things being normal may pertain to health, economy or social spheres. The opposite of normalcy is abnormal which indicates challenges or problems. In terms of normalcy in health of human beings, individuals in the society live without any kind of disease outbreak.

The World Health Organization (2021) sees disease outbreak as an occurrence of disease cases in excess of normal expectancy. It explains that disease outbreaks may be caused by an infection, exposure to chemical or radioactive materials which its transmission is usually from person to person, animal to person or from the environment or other media. Bender (2021) hints that this sudden occurrence of disease outbreak is limited to a particular time and place. This indicates that disease outbreak affects a small or localized group or a continent at a particular period of time but this is far away different from a disease that is referred to as pandemic.

Kelly (2021) views a pandemic as an epidemic occurring Worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people. Robinson (2020) differentiates between outbreak, epidemic and pandemic; an outbreak as an illness that happen unexpectedly in high number in one area or extend to other place at a different period of time usually last

for days or years, epidemic is an infectious disease that spread quickly to larger area than experts can imagine, this does affect more areas than an outbreak. Pandemic is a disease outbreak that spread across countries or continents. It affects more people and take more lives than an epidemic.

The foregoing indicates that a disease outbreak is only transmitted in a smaller area than epidemic and pandemic is a disease that is transmitted throughout the World at the same period of time like that of the new normal coronavirus that showed its face in 2019.

Cambridge Dictionary (2021) sees coronavirus as a type of virus that causes respiratory infections (in the nose, throat or chest) in human and animal which can be a very serious infection that can kill people. This disease is zoonotic, meaning it is transmitted between animals and people. It is caused by a new strain of coronavirus (SARS-CoV-2) which was first reported to WHO on 31<sup>st</sup> of December, 2019 in Wuhan, China. It is also referred to as COVID-19 which 'Co' stands for Corona, 'Vi' for Virus and 'D' for disease (NCDC, 2021).

On 11<sup>th</sup> of March 2020, Director – General of WHO having seen that Covid-19 was severe and that it was spreading quickly over a wide area and had affected more than 118,000 persons across 114 countries and 4291 people had died of the disease, he characterized the disease as pandemic.

Covid-19 pandemic is a deadly disease that is transmitted from person to person through respiratory droplets into the air when a person coughs, sneezes, talks, shout or sing. These droplets can then land in another persons' mouth or nose, it becomes very necessary for every individuals around the globe to wear nose-mouth masks to prevent the spread of this virus. It is mandatory that masks should be worn in addition to staying at least 6 feet apart, especially with visitors or neighbours, covering the nose and mouth and fit snugly against the sides of face without gaps, when in public transportation, when with people age 2 and older people especially people who do not live under the same roof, when visiting the sick, but not importantly necessary to wear when lonely or very far away from people (CDC, 2021).

This new normal of using facemasks in the midst of strange people especially when talking does not exempt student with deafness in early childhood education when in classroom with sign language interpreters or conversing among classmates on campus. Deaf are those that have hearing problem either mild or severe. Deaf are categorized by their acceptance of deaf culture and sign language as a mode of communication.

A Deaf using capital letter 'D' refers to people who have been deaf all their lives or acquired deafness later in life but accept to use sign language as mode of communication as accepted globally or locally by the Deaf community where they live. These individuals make use of this language at school, meaning sign language is used as a mode of instruction starting from their primary school till higher institution of learning while a deaf using lower case letter 'd' refers to people who acquired deafness or born to hearing parents and prefer to communicate with speech. This people do not form connection with Deaf community and they do not regard sign language as a mode of communication. Deaf students make use of sign language amidst their Deaf counterparts, Sign language interpreters use it to communicate with them in class. During this conversation, both manual sign language and oral lip reading are involved for smooth decoding of instruction. However, the compulsory use of facemasks between Deaf students in early childhood education and sign language interpreters is considered a great concern for the duo.

This article aimed at investigating the Covid -19 awareness and influence of the use of facemasks by both Deaf students of early childhood education and sign language interpreters on the effective communication of messages and instructions.

#### Statement of the Problem

Covid-19 emerged as a sudden and deadly disease across the globe which makes compulsory the use of facemasks for all including Deaf students that rely on manual and lip reading as a best way to understand instruction and messages in classroom and in the society.

This new normal has been a very great concern for these students who think it is an impediment to their understanding of messages and instruction while communicating among themselves or with hearing and sign language interpreters on campus.

This article aimed at investigating the influence of the use of facemasks by both Deaf students of early childhood education and sign language interpreters on the effective communication of messages and instructions.

#### **Research Questions**

The following research questions are basic to understanding the purpose of this study:

- i. What is the awareness level regarding covid-19 among Deaf students?
- ii. What are the preventive measures taken by interpreters and Deaf during communication?

- iii. What are the views of Deaf about the use of face masks by Deaf and interpreters during communication process?
- iv. What barriers does the use of face masks have on effective communication?
- v. What are the views of Deaf about the best preventive measures against Covid 19 for interpreters and Deaf during communication process?

#### Methodology

This article adopted descriptive survey of expo- facto research design. The population comprised 13 early childhood education deaf students from Federal College of Education (Special) Oyo, Oyo state which was made the total of deaf students in the department of early childhood care and education. Purposive sampling technique was used to select thirteen deaf students in Afijio local government area. The instrument for data collection was a self-structured interview schedule. The instruments were validated by experts in the field of special education. Thematic approach of data analysis was used to analyze the qualitative data.

Table showing the demographic information Early Childhood Education Deaf students

Variables	Groups	Frequency	Percentage
Gender	Male	8	61.54
	Female	5	38.46
	Total	13	100
Age	18	03	23.08
	20	03	23.08
	21	03	23.08
	22	04	30.76
	Total	13	100
Years of deafness	18	03	23.08
	20	03	23.08
	21	03	23.08
	22	04	30.76
	Total	13	100
Nature of deafness	Hard of Hearing	03	23.08
	Deaf	10	76.92
	Total	13	100
Level	100	05	38.46
	200	05	38.46
	300	03	23.08
	Total	13	100
Preferred means of communication	Total communication	10	76.92
	Manual signs	03	23.08
	Total	13	100

#### **Qualitative Interview Results**

Results from the interview showed that 13 participants participated in the interview.

Theme 1: The first respondent, male, 22 years of age, 22 years of deafness, hard of hearing and total communication as a preferred of communication.

"He reported that covid-19 exists, got information about covid-19 from news captions, and posters. He seldom use nose masks, believe in the use of hand sanitizer, nose masks and maintaining social distancing to prevent being infected with covid-19, believe that sign language should use facemask since the manual signs is clear enough and recommended the use of face shield for sign language interpreters and Deaf colleagues during communication process.

Theme 2. The second person, male, 18 years old, 18 years of deafness, Deaf and preferred total communication as a means of communication.

He reported to believe that covid-19 exists, got informed about covid-19 from online browsing, tv news captions, social media platforms and newsarticles. He seldom use nose mask because it does not guarantee safety from Covid-19, believes covid-19 is spread by physical contacts, feel not comfortable seeing sign language interpreters using facemasks because it reduces effective communication, believes in social distancing as a way to curtail covid-19 spread and proffer the use of face shield and transparent facemasks for sign language interpreters.

Theme 3. The third person, male, 21 years old, 21 years of deafness, a Deaf and preferred manual signs as the best means of communication.

He reported not to believe in totality the existence of covid-19, got informed about it from Tv news captions and social media platforms, use facemask only in public, believe facemasks, regular hand wash with soaps and use of hand sanitizers as a preventive method against covid-19 and maintain social distancing while using sign language to communicate. He believed that facemask can suffocate, gain no message or instruction from sign language interpreters using facemasks and prefer the use of face shield for Deaf colleagues and sign language interpreters during communication.

Theme 4. The fourth person, male, 21 years old, 21 years of deafness, a hard of hearing and preferred manual signs as the best means of communication.

He reported to believe that covid-19 exists, got informed about covid-19 from tv news captions, use facemask every time, believe that covid-19 spread when people do not wash hands regularly and do not use facemasks, observe social

distancing, believed that use of facemasks by deaf students and interpreters prevent effective communication and prefer the use of face shields during communication.

Theme 5. The fifth person, female, 21 years old, 21 years of deafness, hard of hearing and prefer total communication as the best mode of communication.

She reported to believe that covid-19 exists, got informed about it from news captions, social media and online browsing for information. He uses facemask only in public places, believed that covid-19 spread from person to persons through sneezing, coughing, hugging and handshakes. He believed that social distancing and use of facemasks will prevent its spread but discourage the use of facemasks by deaf students and interpreters during communication because it does not make communication effective. He prefer the physical distancing while communication to prevent covid-19 spread.

Theme 6. The sixth person, female, 22 years old, 22 years of deafness, a Deaf and preferred total communication.

She reported to believe that covid-19 is real and exist. Got information about it from TV news captions, use facemasks only in public places, believed that it spread through hugging and practice social distancing, use hand sanitizer and facemask always to prevent its spread. She preferred that interpreter use facemask while at the jaw, did not support full use of facemasks by deaf colleagues and interpreters because it makes communication un-effective. She recommend the use of sanitizer and face shield for interpreters and deaf students.

Theme 7. The seventh person, male, 22 years old, 22 years of deafness, a Deaf and preferred total communication as a communication option.

The respondent believes that covid-19 is real but it is politically and economically motivated in Nigeria. Got information about it from social media and individual chat, uses facemask always, believe that people are infected with covid-19 because they do not observe social distancing, believe that social distancing, use of facemasks and use of hand sanitizers always will help to prevent the spread of covid-19. He believed that use of facemask can suffocate people, he did not agreed to sign language interpreters and Deaf students should use facemask when communicating because it makes lip reading and communication process ineffective. He therefore recommended clear facemask and face shield for interpreters and Deaf students.

Theme 8. The eight person, male, 22 years old, 22 years of deafness, a Deaf and preferred total communication as a communication option.

He reported to believe that covid-19 is real. Got information about covid-19 from individual chats, social media, TV news captions and newsarticle.

He reported to believe that covid-19 is real and exist in Nigeria but it is used to get unreasonable sympathy from the world powers and use to embezzle public funds. Got information about it from social media, uses facemask only when going to public places, believed it is spread through physical contacts, believed that regular checkup of covid-19 status, physical distancing, coughing to the flex or handkerchief and use of facemasks will help to prevent its spread. He believed in the use of facemasks by Deaf students and sign language interpreters though it makes lip reading difficult, message and instruction decoding ineffective. He however, recommended the use of face shield without facemasks.

Theme 9.The ninth person, male, 18 years old, 18 years of deafness, a deaf and preferred total communication as a communication option.

He reported to believe that covid-19 exist. Got information about covid-19 from individual chats, social media, TV news captions and newsarticles, use facemask only in public places, believed that covid-19 is spread through liquids from infected person to another, he believed that people should be educated and enlightened about its spread and prevention, use facemasks regularly, observe social distancing, and stay at home when necessary. He advised facemask should only be used when in public, believe that lip reading is difficult and communication is ineffective when Deaf students and interpreters use facemasks. He however, recommended face shield and physical distancing without facemask nor shield when communicating.

Theme 10. The tenth person, male, 18 years old, 18 years of deafness, a Deaf and preferred total communication as a communication option.

He reported to believe that covid-19 is real but not in Nigeria, got information about it from newsarticle, TV news captions and individual chats. Physical contact is considered to spread covid-19, social distancing, regular washing of hands with soaps and use of sanitizers are the best options to curtail its spread. He believed that lip reading is difficult which makes communication ineffective when Deaf students and sign language interpreters use facemask when communicating. He recommended physical distancing without the use of facemasks by Deaf students and interpreters when communicating.

Theme 11. The eleventh person, female, 20 years old, 20 years of deafness, a Deaf and preferred total communication as a communication option.

She reported to believe that covid-19 exists, got information about it from social media, make use of facemasks only when in public, believed that physical contacts aid the spread of covid-19 from person to person, also believed that use of facemasks, maintaining social distancing and regular wash of hands with soaps

help to prevent the spread of covid-19. She advised that Deaf students and sign language interpreters should use facemasks but place it jaw level when communicating messages or instruction. She lamented that full use of facemasks always affect communication process negatively, she, however, recommended that Deaf students and interpreters should observe physical distancing without using facemasks while communicating messages or instruction.

Theme 12. The twelfth person, female, 20 years old, 20 years of deafness, a Deaf and preferred manual signs as a communication option.

She reported to believe that covid-19 is real, got information about it from social media, use facemasks when in public places, believed that hugging, handshakes and other physical contacts help the spread of covid-19, believed that social distancing and use of facemasks help to curtail the spread of covid-19. She lamented that use of facemasks by Deaf students and interpreters makes lip reading difficult thereby making communication ineffective.

Theme 13. The thirteenth person, female, 20 years old, 20 years of deafness, a Deaf and preferred total communication as a communication option.

She reported to believe that covid-19 is real and exist, got information about covid-19 from online browsing and TV news captions, use facemasks only in public places, covid-19 spread through physical contacts and can be curtailed by maintaining social distancing. She believed that use of facemasks by Deaf students and sign language interpreters makes lip reading difficult and communication ineffective. She recommended that Deaf students and sign language interpreters should communicate from far without using facemasks.

#### **Discussion of Findings**

#### 1. What is the level of knowledge of covid-19?

From the interview conducted on Deaf students on the knowledge of covid-19, it was gathered that majority of Deaf students believed that Covid-19 is real and it started in Wuhan, China and it manifests in an infected person through coughing, difficulty in breathing, running nose, Most of the respondents got information from TV news captions, posters, online browsing, social media (WhatsApp, Twitter, Facebook and Instagram), newsarticles and face to face communication. Deaf students believed that Covid-19 is spread from person to person through physical contacts (handshakes, kissing hugging) non- practicing of social distancing and non-use of facemasks which allow for droplets from sneezing, coughing. This findings is in contrast to the stand of Cleveland Hearing and Speech (2021) which reports that Deaf struggle to get access to critical

information about covid-19 and any safety orders because captioning and written English are not adequate methods for information access due to inaccuracies in captioning or limited English proficiency that is common for people with Deafness. However, Engel-Smith (2020) reports that sign language interpreters are provided to relay speaker's messages at briefing and conferencing and some television stations also include captions of interpreters on the screen during news casting.

## 2. What are the preventive measure taken by interpreters and Deaf during communication?

From the interview conducted on Deaf students on the preventive measure to be taken to curtail the spread of covid-19, it was gathered that regular washing of hands with soap, use of hand sanitizers, use of facemasks, observing social distancing, regular checking of covid-19 status, staying at home when necessary, regular use of hand gloves and using sign language to communicate while maintaining physical distancing. This findings is in line with Davis (2020) who admitted that the Deaf community welcomed the use of transparent masks because it is a must to be worn for protection against Covid-19

### 3. What are the views of Deaf about the use of face masks by Deaf and interpreters during communication process?

From the interview conducted on Deaf students about use of facemasks by Deaf and sign language interpreters during communication, it was gathered that majority of Deaf students do not feel comfortable seeing other Deaf and sign language interpreters using facemasks during communication some however, prefer facemasks to be drawn to jaw level for lip reading. This findings is in tandem with Chodosh, Freedman, Weinstein &Blustein (2020) maintains that facemasks create enormous challenges for members of the Deaf community who use sign language.

#### 4. What barriers does use of face masks on effective communication?

From the interview conducted on Deaf students about the barriers placed by the use of facemasks when communicating, it was gathered that majority of Deaf students dislike the use of facemasks by other Deaf students and sign language interpreters during communication process because it makes lip reading difficult thereby making communication ineffective. This findings is in line with Martinal (2020) who avers that Covid-19 forced us to wearing facemasks which has made the reading of lips and facial expression difficult thereby leading to confusion and misunderstanding of instructions and messages.

## 5. What are the views of Deaf about the best preventive measures for interpreters and Deaf against covid-19 during communication process?

From the interview conducted on Deaf students about the best preventive measures for interpreters and Deaf against Covid-19 during communication process, it was gathered that majority of Deaf students recommended that other Deaf students should present the sign language slowly and clear enough, use face shields without facemasks while maintaining the physical distancing rule. This finding is in agreement with Martinal (2020) who reports that clear masks makes communication better as it removes communication barriers.

#### Conclusion

The emergence of Covid-19 pandemic caused a lot inconveniences to all especially to early childhood education Deaf students in all citadel of learning that rely on manual sign language and lip reading for effective communication. The use of facemasks by Deaf and sign language interpreters have been shown as being worrisome to communication among these students. This article was therefore carried out to proffer appropriate recommendations that would alleviate the negative effects of Covid-19 on the effective communication of these students.

#### Recommendations

Government and non-governmental organizations should sponsor sign language interpreters to interpret news and other informative programmes on TV while making the interpreters visible enough so that Deaf can read hands, gestures, facial expression and finger spelling.

School administrators should always employ capable hands that can sign clearly for effective communication of instructions in and outside the classroom.

Schools should make provisions for hand washing buckets with soaps and hand sanitizers at every entrance of each classrooms and offices.

The management of schools should put task force in place to make sure that all students and staff maintain social distancing while communicating.

Deaf students and Sign language interpreters should maintain physical distancing while communicating without the use of face shield or facemask because using this protective materials will make effective communication reduced or difficult.

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