Communication Implications of Post-COVID-19 Socio-Cultural Changes for Persons with Disabilities: The Nigerian Experience and Scholarly Response

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Abstract

COVID-19 pandemic has produced socio-cultural changes for people of all races and backgrounds. It has heightened inequality and increased the marginalisation of many vulnerable groups in which persons with disabilities in Nigeria are a part. This research investigated the communication and social and cultural problems experienced by persons with disabilities in Nigeria in general and Cross River State in particular occasioned by the COVID-19 pandemic. The study was anchored on Communication Accommodation Theory. Qualitative research method utilizing instrument of focus group discussions was employed for this study. The data were analysed using the explanation building technique as well as rhetorical narrative to provide the basis of interpreting qualitative gathered for the study. Findings indicate among others that the application of COVID-19 protocols affected the socio-cultural life in general and learning environment of persons with Disability (PWD) In particular. For instance, the study found that the use of Nose Masks affected sound and voice recognition for the visually impaired while it affected lip-reading for the Hearing Impaired. The study further revealed that COVID-19 protocols of physical/social distance created the fertile ground for discrimination of varying degrees against PWD's. It was therefore, recommended among others that if necessary at any point of health emergency of similar situation or continued enforcement of COVID-19 protocols, there should be differential procedures in the application of some of the protocols like special face-shield, personal protective equipment, development of plastic Braille papers for easy sanitizing. It is also recommended that advocacy; social mobilisation and behaviour change communication strategies should be adopted to stem discrimination against PWD's.

Keywords: Communication Implications, Post- COVID-19 Socio-Cultural Changes, Persons with Disabilities (PWD), the Nigerian Experience, Scholarly Response.

Introduction

This research titled: "Communication Implications of Post- COVID-19 Socio-Cultural Changes for Persons with Disabilities: the Nigeria Experience and Scholarly Response" investigated the status of persons with disabilities in what is required to enhance their means of communication and interaction among themselves and other people in the post-COVID-19 era. This was ultimately to bridge the gap in communication and interaction between persons with disabilities and other Nigerians that have become new normal.

Statement of the Problem

Currently, Special Need people given various derogative and/symbolic tags are trained to communicate and interact with one another and other segments of the society in various ways. Those with vision loss are trained to move about by being led by hands, making it difficult to observe social distancing required by the culture of COVID-19 or most communicable disease outbreaks; or through the use of Mobility Canes likely to be exposed constantly, to COVID-19 or other hemorrhagic infections. The visually impaired persons also depend on sound, but the wearing of the Face-Masks that had become or is likely to become an aspect of human culture during communicable disease outbreak comparable to COVID-19 significantly affects the sound of many human voices. They also read by means of touching; thereby increasing their exposure to infections by Corona virus. A person that is both blind and deaf is even more endangered than a person with only vision loss. This is because apart from imbibing the culture of being led by hand, using of Mobility Canes and tactile reading mode, they can only have effective communication with others through lip-reading involving touching the lips of those with whom they communicate with.

Persons with hearing loss are educated to remain in close proximity with all the people they interact with to be able to lip-read and draw inferences from gestures from those they communicate with. This also violates the protocol of observing social distancing. In situations whereby those with multiple forms of impairment are required to lip-read for effective communication, it becomes extremely difficult, if not impossible to do any successful lip-reading when those with whom they interact with wear face-masks.

The socio-cultural issues surrounding persons with different forms of physical disabilities have also drastically changed with COVID-19 pandemic and are likely to remain so for a long time. Assisting a person in a wheel-chair, for example, brings the helper closer to less than a meter or two to the person in a wheelchair. Often, in buildings that are not disable friendly, persons in wheelchairs that cannot go up-stairs or down-stairs on their own are carried like children to desired locations, thereby, exposing such helpers and those in wheel-chairs they are assisting, to greater risk of COVID-19 infection or infections from similar diseases. Most Nigerians who are victims of paralysis do not even have Wheel-Chairs and move with unprotected hands on the ground, increasing the risk of contracting COVID-19.

Arising from the increased challenges caused by COVID-19 pandemic or similar communicable disease outbreaks in the future faced by persons with disabilities, as well as the internalization of

new socio-cultural changes and language nuances there from, one may ask, what role can scholars in Nigeria play to address the problems (especially those in the Department of Mass Communication as well as those in the Departments of Special Education/Guidance and Counseling, in the Universities of Calabar and Cross River State do? This study, therefore, attempted to answer this question.

Objectives of the Study

The purpose of this study was to investigate the communication implications of the socio-cultural changes for persons with disabilities in Nigeria, brought about by COVID-19 pandemic and how communication scholars in Mass Communication including those in the areas of Special Education as well as Guidance and Counseling can respond to the challenges. The specific objectives of the study were as follows:

i. To find out the influence of COVID-19 Pandemic on the communication, mobility and reading styles of persons with vision loss in Nigeria and how the scholars of Communication and Special Education/Guidance and Counseling should respond.

ii. To determine the level of influence the socio-cultural changes brought about by COVID-19 pandemic on the communication and lip-reading ability of the deaf-blind persons and those with hearing loss in Nigeria, and how Communication/Special Education/Guidance and Counseling scholars should address these changes.

iii. To identify new forms of communication and interaction among members of the various categories of persons with disabilities and with other members of the Nigerian public which need to be scholarly proposed to stem the impact of COVID-19 in Nigeria.

iv. To ascertain how scholars in communication should employ communication strategies of advocacy, behaviour change communication and social mobilisation to manage the socio-cultural challenges of persons with disabilities in Nigeria brought about by COVID-19 pandemic.

v. To find out how scholars in Communication and Special Education/Guidance and Counseling should engage in the dissemination of the proposed new forms of communication and socio-cultural interaction among the different categories of persons with disabilities and the general public in Nigeria.

Research Questions

The following are specific research questions to be answered in the course of this study:

i. What is the influence of COVID-19 Pandemic on the communication, mobility and reading styles of persons with vision loss in Nigeria and how the scholars of Communication and Special Education/Guidance and Counseling should respond?

ii. To what extent have the changes brought about by COVID-19 pandemic affected the lip-reading ability of the deaf-blind persons and those with hearing loss in Nigeria, and how should communication and special education scholars address these changes?

iii. What new forms of communication and interaction among members of the various categories of persons with disabilities and with other members of the Nigerian publics need to be scholarly proposed to stem the impact of COVID-19 on persons with disabilities in Nigeria?

iv. In what ways should scholars employ communication strategies of advocacy, behaviour change communication and social mobilisation to manage the socio-cultural challenges of persons with disabilities in Nigeria brought about by COVID-19 pandemic?

v. How should scholars in Communication and Special Education/Guidance and Counseling engage in the dissemination of the proposed new forms of communication and socio-cultural interaction among the different categories of persons with disabilities and the general public in Nigeria?

Justification of the Study

This study is justifiable in several ways.

It may provide the academia with research product(s) and documented evidence of project work through publications in reputable academic platforms. It may provide scholars of communication, special education and guidance and counseling curricula as well as government/voluntary group's useful information with which to work with to improve the lots of persons with disabilities during health emergences. It might come up with new approaches and strategies to address the problem of communication and interaction with and among persons with disabilities during communicable disease outbreaks. It may provide evidence on the existing relationship between scholarly input to socio-cultural changes confronting persons with disabilities as a result of COVID-19 pandemic and the management of the experiences of persons with disabilities in Nigeria. It may lead to upscale discussions/reviews that will ultimately shape scholarly and public conversations as well as concerns around issues of inclusion of persons with disabilities through effective communication and social interaction not only in Cross River State, but Nigeria and beyond.

Literature Review

The Impact of COVID-19 on Persons with Disabilities

Kanu, (2020) observed that the COVID-19 pandemic has heightened inequality and increased the marginalisation of vulnerable communities. One of such vulnerable segments consists of people living with disabilities who already faced harsh difficulties in Nigeria before COVID-19. He noted:

Now, largely unnoticed in the general media, disabled individuals face increased healthcare, social, and economic risks; thus, it is essential to shed light on the importance of an inclusive response to limit the impact of COVID-19 on Nigeria's disabled community.

The Influence of COVID-19 on Communication

The Lawrence Ragan Communications (2020) new report, based on a survey of more than 400 communicators, looks at how the corona virus crisis has affected the communications function,

and it offers insights into how leaders can best serve their communities and stakeholders. According to the Lawrence Ragan Communications (2020), The COVID-19 crisis has touched every industry (university's Communication and Special Education/Guidance and Counseling Scholars), and its impact on communications teams (Persons with disabilities) has been unusually profound.

As noted by the Lawrence Ragan Communications (2020), organizations which of course, include university's Communication and Special Education Scholars seek to engage an array of audiences—both internal and external—the communicator/special educator has come to the fore as a strategic asset. As the Lawrence Ragan Communications (2020) further noted, media organizational leadership must share important news, updates, guidelines and more with employees and team members which in the context of this study applies to persons with disabilities. Similarly, as the Lawrence Ragan Communications (2020) advised, "External messages must be tailored to avoid tone-deaf, missteps etc." In this context, steps need to be taken to avoid miscommunication between the different groups of persons with disabilities and the society.

COVID-19, Framing of Disabled Persons and Policy Decisions

Campbell et al. (2020) have explored several questions including whether the 'vulnerability' framing is likely to inform future policy and what the implications are for disabled peoples following the COVID-19 pandemic. They observed that there has been a shift in many countries over recent decades to position disability policy as an issue of rights and equality: the aim is social and economic participation, rather than a more paternalistic concern for care and containment. This found its expression in the UN Convention on the Rights of Persons with Disabilities, ratified by 181 countries by 2020. Campbell et al. (2020) observed that some states, for instance Australia responded to the COVID-19 crisis by creating plans framed precisely in terms of disabled people's rights to equal treatment (equality in healthcare, employment and the like).

Review of Studies

Below is the review of two of such studies

Wittenberg, et al. (2020) conducted a study titled: "Opportunities to improve COVID-19 provider communication resources: A systematic review" understudied communication as it is related to COVID-19 between provider and the patient/family impacted by isolation requirements, time limitations, and lack of family/partner access. The aim of the study was to determine the content of provider communication resources and peer-reviewed articles on COVID-19 communication in order to identify opportunities for developing future COVID-19 communication curricula and support tools. A systematic review was conducted using the Up-To-Date clinical decision support resource database, CINAHL, PubMed, PsycInfo, and Web of Science. The grey literature review was conducted between September 2020 and articles published between January-September 2020 written in English were included. In a total of 89 sources included in the review, (n = 36 provider communication resources, n = 53 peer-reviewed

articles) Resources were available for all providers, mainly physicians, and consisted of general approaches to COVID-19 communication with care planning as the most common topic. Only four resources met best practices for patient-centred communication. All but three articles described physician communication where a general emphasis on patient communication was the most prevalent topic. Reduced communication channels, absence of family, time, burnout, telemedicine, and reduced patient-centred care were identified as communication barriers as shown in the findings of the study. Communication facilitators were team communication, time, patient-centred and family communication, and available training resources. The study concluded that the resources lack content that address non-physician providers, communication with family, and strategies for telehealth communication to promote family engagement. The gaps identified in this review reveal a need to develop more materials on the following topics: 'Provider moral distress, prevention communication, empathy and compassion, and grief and bereavement'. An evidence-based and theoretical grounding in communication theory is also needed. Undoubtedly, some of these gaps may be filled by this current study.

Another study worthy of mention here was conducted by Riedl and Schüßler (2020) titled: "the Influence of Doctor-Patient Communication on Health Outcomes: A Systematic Review". The objective of the study was to evaluate the influence of the doctor-patient relationship and communication on healthcare outcomes, further reliable results are needed. More specific results can be achieved depending on the differentiation of several domains (e.g., relationship, information gathering, or patient education). The authors conducted a systematic review including publications from 2000 to 2015 to gather further empirical support. Information was drawn mainly from Medline, Embase, Cochrane, PsychLit, and Psyndex to identify RCTs as well as controlled and uncontrolled studies in clinical adult samples. Studies with psychiatric samples and psychological psychotherapeutic interventions were excluded. A total of 17 RCTs, 17 controlled studies, and 8 qualitative studies met the inclusion criteria. The quality of the RCTs and controlled studies was satisfying. In the doctor-patient relationship (building), 60% of the studies showed a positive effect on objective health parameters. Information gathering and provision (patient education) were the most investigated domains with unequivocally positive effects. Communication (skills) showed improved results and enabled treatment-related emotions and behaviour. Two studies included an economical evaluation with reduced healthcare costs. The study revealed different domains of the doctor-patient relationship and communication with convincing effects regarding different objective and subjective health outcomes. However, the focus of this current research is to enhance instructor-students' interaction, especially as it pertains to learning environment of PWD's.

From the studies reviewed compared to the current research, it is clear from their titles, focus and objectives that they are different from the current study. This is the gap the current study intends to fill.

Theoretical Framework

This research is anchored on Communication Accommodation Theory and the Diffusion of Innovation Theory.

Communication Accommodation Theory was developed by Howard Giles in 1971. Communication Accommodation Theory is particularly concerned with how people from different cultural or generational groups (including disabled groups) adjust to understand or accommodate each other when they communicate. The basis of the theory lies in the idea that people adjust their style of speech or communication behaviour to accommodate others (disabled persons). The theory was developed by Howard Giles in 1971 and termed Speech Accommodation Theory. Griffin (2000, p. 395) defined Accommodation as the constant movement (adjustment) toward or away from others by changing one's communicative behaviour. According to Griffin, Giles claimed that when two people from different ethnic or cultural groups interact, they tend to accommodate each other in the way they speak in order to gain the other's approval. In other words, speech accommodation is a strategy often used consciously or unconsciously to gain the appreciation of people who are from different groups or cultures. This process of seeking approval by fitting into another's style of speaking is at the core of speech accommodation theory. However, due to the complex nature of human communication, which is not only limited to speech - accent, pauses and pronunciation, in 1987, Giles changed the name of the theory to Communication Accommodation Theory (CAT) and offered it as a theory of intercultural communication that actually attends to communication. (Griffins, 2012).Giles identified two strategies that people usually use when they interact - convergence and divergence. Convergence is a strategy of adapting one's communication behaviour in such a way as to become more similar to another person. That is, individuals try to adapt to each other's communication behaviour in order to reduce their social differences. In the context of this study, one way to promote communication convergence which incorporates persons with disabilities is to devise new ways of accommodating persons with disabilities in the new culture of communication consciousness of social distancing through nuances of verbal and non-verbal forms of communication including new modes of sign language, etc. In the context of this research, Giles' strategy of divergence in communication which is a communication strategy of emphasising or making obvious the conversational differences between one and others, though to be identified in this study, is to be discouraged in order not to widen the present gap in communication between the so-called "normal" and "persons with disabilities."

Methodology

This study adopted qualitative research methods. The quantitative method of data collection involves the process of obtaining information for generalization. It involved a range of research techniques that use unstructured forms of data collection, and employing as instruments, three focus group discussion segments comprising i. eight special education teachers with one Sign Language Interpreter, ii. Seven communication scholars and iii. Ten persons with disabilities who were either students in tertiary institutions or workers in ministries or a Sign Language interpreter respectively. Mack, et al. (2005) cited by Dominic (2011) opine that the strength of qualitative research is its ability to provide complex textual descriptions of how people experience a given research issue. It provides information about the "human" side of an issue - that is, the often contradictory behaviours, beliefs, opinions, emotions, and relationships of individuals. Qualitative methods are also effective in identifying intangible factors, such as social norms, socioeconomic status, gender roles, ethnicity, and religion, whose role in the research

issue may not be readily apparent. Explanation building technique was used to analyse data gathered.

This work was carried out in the Departments of Mass Communication University of Cross River State and Special Education, University of Calabar, Nigeria.

The Department of Mass Communication, University of Cross River State (UNICROSS) was set

Up in 2002 and has been one of the most reputable departments awarding degrees in the various areas of Mass Communication up to the doctor of Philosophy level. The Department of Special Education, University of Calabar on the other hand, hosts some of the most qualified special education academics in Nigeria.

Data Presentation, Analysis and Discussion of Findings

The data analysis and discussion of findings are done in relation to the five research questions directing this study.

Research Question One: What is the influence of COVID-19 Pandemic on the communication, mobility and reading styles of persons with vision loss in Nigeria and how the scholars of Communication and Special Education/Guidance and Counseling should respond?

Research Question Two: To what extent have the changes brought about by COVID-19 pandemic affected the lip-reading ability of the deaf-blind persons and those with hearing loss in Nigeria, and how should communication and special education scholars address these changes?

To answer these first two research questions, the first question put forward by the moderators to the Three Focus Group Discussions (FGD) segments sought to know to what extent of the COVID-19 protocols the participants were more familiar with.

Analysis of participants' responses indicates that all participants demonstrated familiarity with more than three COVID-19 protocols, including facemask use, social distancing, frequent hand washing/sanitizing, use of protective clothing, not shaking hands, and use of gloves. Most participants mentioning social distancing first, followed by regular hand washing/hand sanitizing. Participants were then asked to indicate which of the COVID-19 protocols they found easiest and hardest to observe in the line of duty.

In the response to this question, we begin with the Data from Focus Group Discussion with Special Education and Counselling Specialists at the University of Calabar, Nigeria.

A visually impaired participant, Olayi in a personal communication (2022) stated that the use of nose or face mask was the hardest protocol to follow because face masks interfere with the sound of voices, and can hamper the learning process of learners dependent on sound and listening. This according to him occurs following the change in voice (like voice recognition difficulty), effect on pronunciation and accents, and difficulty in understanding, arising from the speech muffled through face masks. Gloves were hard to use because "most of us who use our fingers to read will have problems reading Braille. And then those of us who identify by mere touch will

have a problem with using gloves and making perfect identification of things like facial recognition, or characters on doors, tables, money and so on that would normally guide one". The easiest protocol to keep, for him, is hand washing/sanitizing.

The hearing-impaired participant, Irokoba in a personal communication (2022) also indicated that face masks protocol was difficult to abide by, because the masks interfere with crucial lip-reading processes. "The people in my community (the hearing impaired community) found it difficult because people who sign … the signers … if they cover their nose and their mouth, it will be difficult for them (to communicate)."For him, hand washing and social distancing were easy. "During that time (heat of COVID-19 pandemic) most of my activities in school communities was through internet … I participated in all Zoom meetings; you stay at home and log in to meetings."A visually impaired participant, Olayi (2022) agreed with the face mask challenged for the hearing impaired, saying since their communication was dependent on movements of hands and mouths/lips, "If the face mask is covered the individual will not be able to interpret what the speaker is saying." He also opined that signing with gloves on is cumbersome.

Social distancing was also deemed a problem for the hearing-impaired in classroom settings, where they depended on copying notes from the books of students without hearing impairments. It also had added implication for hearing-impaired learners with blurred vision: "Some may even have some blurred vision. So by sitting far away from the interpreter, they still encounter problems."

It was generally agreed that hand washing and sanitizing is the protocol easiest to adhere to for people living with various physical impairments/challenges. This however still posed a peculiar challenge for the visually impaired who access information tactilely. The following contributions by two visually impaired participants revealed this conundrum. Agba (2022) excitedly said: "But you cannot even wash your hands and go back to read Braille easily unless you wash your hands and mop it thoroughly with a towel" Olayi (2022) interjected concurring) "But will you mop the Braille paper with sanitizer?"

Agba (2022) Continuing: "You see? That is the situation!"

The prospect of recontamination after hand washing/sanitizing was identified as a lingering threat, as questions of how to read the Braille pages which will not have been sanitized linger unanswered. As a visually impaired participant, Agba (2022) put it:

… The issue of reading Braille, whether you wash your hands; is like bathing a pig that has to go back to the mud, the question is "how do you sanitize a Braille paper that is not a plastic paper? That was the major problem for me as a teacher, and reading my books became scary. I don't know - whether COVID 19 virus is deposited on the paper. I may wash my hands before and after but in-between, I could have something itching me in my nose and …it's just like washing your hands to go and eat and you have to crawl on the floor again. By the time you get to where the food is, you still need to wash again."

As expressed by another visually impaired participant, Olayi,

"The issue of touching your nose, eyes, ears, was forbidden so if you wash or sanitize and you go back to read your Braille books, ... and the Braille paper can be a very favorable ground for it (COVID-19 virus). There was a serious deprivation of persons who depend largely on reading with their fingers in Braille format ...I have some strange feeling around my nose, I will be afraid of inhaling what I have just touched ..."

In the FGD held with a cross section of students with special needs, working persons with disability comprising Special Education teachers, those working in Ministries/Parastatals and a Sign Language Interpreter, the physically challenged participant indicated that using a face mask was the easiest because it can be personally managed, whereas washing hands frequently was difficult as is maintaining social distance. This is because using a wheelchair for mobility, he cannot easily reach water sources independently, and assistance with mobility requires close contact.

Conversely, all visually challenged participants indicated that the use of hand sanitizer was easiest for them especially when in public. However, social distancing was the hardest protocol to be adhered to because close proximity was required for assistance with learning activities, often by strangers. Also, many in this category of PWD found the use of face masks and face shields difficult for reasons ranging from interference with sounds to distortion of facial identification by others. Some however indicated that using a face mask was used to minimize infection in close quarters.

Participants with speech and hearing challenges found using face masks difficult because they obscure lips and facial expression crucial for communication, and give a feeling of suffocation. Social distancing was considered difficult because of the need of interpreters for communication. This category also found using hand sanitizers easiest to adhere with.

The participants in the FGD segment for Students in tertiary institutions working persons with disabilities were also asked how COVID-19 protocols regarding social distancing and touching had affected the way they move around and read/learn. In responding to this question, the visually challenged revealed that mobility was an increased challenge because as Okon (2022) stated, "…everybody then was a suspect … Calling (a stranger) to (help) you … They will always run away…" Studying time was affected for them because in the absence of eBooks, ability to read hardcopy text is constrained by the availability and time schedules of assistants. "(when) you want to do some research, you need to get a friend or course mate to read some books out for you and … so if this person translates this … and delays, what you would have done under 30 minutes or 1 hour (will take a day or more) … it slows the process down."

Safe access to hardcopy books was another challenge to visually challenged learners; according to Usang (2022) in a personal communication said, "One of the sense organs that is very effective in the visually impaired, is touch. (Being) afraid of every surface, that was our problem …because you wouldn't know (if) the person that just finished reading that book may have been infected".

A related reading/learning challenge to visually challenged learners posed by COVID-19 protocols is reading Braille, which is 100 percent touch- centred." As Usang (2022) put it, "some

of these surfaces have been infected with (the) COVID 19 virus. One thing with Braille is that if you carry sanitizers to touch, except if it is the plastic own, you are spoiling, or deleting (its contents). At that time, I decided not to do any reading again because touching anything; it means that that must have been touched by somebody else."

A physically challenged participant, Agbor (2022) in a personal communication revealed that when personally accessing books in libraries and resource centres became difficult, the online learning option came to the rescue. However, this poses a different set of challenges, for as he stated, "Though we have resorted to using our internet, reading online and getting electronic books, … the cost of data to stay online is high."Okon (2022) a visually challenged echoed this concern, saying, "we like that new normal (online studying), but the cost implication of it! You need to pay for data which is very expensive in this part of the world. It is a good one but it has some limitations which will drag us back to our old ways…. to go and get a new handset … that a visually impaired person could use now would cost nothing less than 90-100 thousand naira. It brings more challenge to us with the cost implication."

Frequent hand sanitizing was mentioned by all participants, as easiest and the most crucial protocol where assistance is often with unknown people and dynamics, especially in study environments. However, when asked how many participants possessed personal hand sanitizers, and actually had them handy at the time; all said they owned hand sanitizers, but only three had them on hand, while others had left theirs at home. (This indicates a reduced compliance to COVID-19 protocols and a reduced sense of risk of contracting the virus).

As people with visual challenge, Afem (2022) a participant with Albinism, lamented that for persons with albinism, learning was affected because of social distancing requirements. According to him, "As an albino, when you talk about distancing, it poses a lot of problems for us …. In the classroom, an albino child needs to be very close to the board, no matter how bold or tiny a teacher's handwriting may be ,,, but out of 100%, not even 5 teachers will want you to go close because of the pandemic issue …they don't know what you are carrying; they can't … pity you and … endanger their (own) lives …"

Individuals with hearing challenge who depended on lip reading, facial expressions and sign language were also peculiarly challenged by COVID-19 protocols. According to Usang, a hearing impaired person in a personal communication (2022), when interpreters (signers) wear face masks, comprehension is made difficult, since facial expressions cannot be fully seen. This is crucial as some signs are accompanied by serious or smiling expressions to convey accurate meaning. Atuaka another hearing impaired participant in a personal communication (2022) added that because of social distancing protocols, "students stay separately instead of coming together, and even teachers had difficulties touching things like their students' books."Especially where some students drool, and marking exercise books became difficult because you don't know from where they must have brought the books".

On how COVID-19 changes (such as social distancing and restricted touching) have affected the way persons with disability communicate, all the participants revealed that awareness of COVID-19 and how it is transmitted greatly affected instruction habits and processes, especially for

people with visual disability, because it affected the willingness to teach the visually impaired, which requires up-close and hands-on methods. Social distancing and not touching were therefore difficult to observe. According to Agba (2022) in a personal communication, he was before the outbreak of COVID-19 used to often do community service in Bassey Kubianga (B.K.) education Foundation and when teaching Braille or technology and other teaching and learning of the visually impaired, the interaction has to be on one-to-one, so, with social distancing, it means such teaching and learning cannot take place. He lamented that he had to stop the community service at the B.K. Foundation since 2020. This revelation is in contrast with the basic assumption of Communication Accommodation Theory which believes that communication must adjust to accommodate each other in communication.

It is therefore proposed that when such instruction is resumed, wearing light gloves that enable feeling may be introduced to minimize infection and cross contamination.

This alternative is not widely accepted, however. As Usang (2022) put it, "With … gloves, it's … difficult to read Braille because you really need to identify the dots to know actually what you're reading … I've tried it, it was not working well".

Research Question Three: What new forms of communication and interaction among members of the various categories of persons with disabilities and with other members of the Nigerian publics need to be scholarly proposed to stem the impact of COVID-19 on persons with disabilities in Nigeria?

To provide answer to Research Question Three, The opinions of the participants in the three FGD segment were sought.

In the FGD segment with Special Education Teachers/Guidance and Counseling, the participants were asked to what extent COVID-19 Protocols have Affected the Way they Communicate with and Teach Individuals with Vision Loss and Other Physical Challenges.

Analysis of the responses from the participants indicates that COVID-19 protocols have instilled promotes hesitance and fear among many teachers. Though virtual learning has become a viable alternative, it is not always an option, so COVID-19 has greatly hampered learning for persons living with disabilities.

According to a visually impaired participant, Olayi in a personal communication (2022),

there are certain ideas you would want to teach to a child who is not using vision to learn ... would need to demonstrate or physically present the item ... for the child to feel, and ... you remember the fear of getting infected ... you have a problem ... learn(in) through ... physical orientation or environment ... will require you going physically with the child. Taking the child's hand, talking (closely), demonstrating to the child. Learning as far as this is concerned is impeded.

COVID-19 protocols have also affected class sizes and put strain on teachers. According to an unimpaired participant who teaches the hearing impaired, Ewa in a personal communication (2022) said, "because of breaking up classes for physical distance compliance … a class that

(would have taken) 30 minutes … is now elongated… and it tells more on the teacher", causing stress from repetition.

On how the participants interact with individuals with hearing impairment requiring to lip-reading for communication in view of COVID 19 protocols, unimpaired instructor Ewa in a personal communication (2022) said: "it's difficult… face masks impede lip reading, and so …go against the ethics of using the facial mask … (it is necessary to pull it off so that the student will be able to watch your lips."

This is seen by participants as hazardous, as it increases the risk of hand contamination.

Hearing impaired participant, Irokoba in a personal communication (2022) said: "(one ends up) adapting mask-use ethics … you wear a face mask, but remove to communicate, then put it back on." For social distancing purposes, classroom seating in semi-circles better facilitates communication. Sitting in U-shape formations, people can easily see and communicate with those to their left or right: "If they sit in rows and somebody wants to talk, you cannot turn back to look at the person. That means that class room environments have to be changed"

On how participants have managed learning, interaction and communication as a result of social-cultural changes brought about by COVID-19, a cross section of participants in the FGD segment with students in tertiary institutions and working class of persons with special needs described different they managed the new normal. According to Agba (2022), who is visually challenged, instead of physical meetings, virtual learning has increased, and hardcopy assessments reduced. Whereas the former mode of assessment would require scripts to be handled and read to the instructor by others, the later mode enabled no-contact assessment. "Instead of saying give me your assignments; I would say send it to my email or send it to my WhatsApp. Send soft copies to me as a way of reducing contact. It has come to stay; I am now finding it easier to adopt that method. Virtual meetings could be organized more where we may not need contact", he asserted. With this method, the soft copies are read out by the computer, and the assessment safely carried out without any physical contact with scripts. This not only reduced potential contamination, it also saved time that would have been spent waiting for the assistant to read and write out assessments/grades. Meanwhile, Atuaka (2022) who is a speech and hearing challenged instructor said, "(we) like communicating through WhatsApp chats."

Research Question Four: In what ways should scholars employ communication strategies of advocacy, behaviour change communication and social mobilisation to manage the socio-cultural challenges of persons with disabilities in Nigeria brought about by COVID-19 pandemic?

To provide answer to this research question, although participants in the three FGD's were involved, the FGD with communication scholars was in the front burner.

In response to the above question, FGD segment with communication scholars identified discrimination against persons with disabilities as one of the challenges faced by PWD's as a result of the socio-cultural changes arising from COVID-19 pandemic . In their majority opinion, COVID-19 protocols directly or indirectly encouraged discrimination against PWD regarding their learning environment in particular and living standard in general. While some of them

believed that the perceived discrimination was deliberate, some were of the opinion that it was inadvertent. As a solution, all the participants believed that application of advocacy, social mobilisation and behaviour change communication strategies can correct any perceived discrimination against persons with disabilities. The opinions of the participants with scholars of communication are in tandem with those of Campbell et al. (2020) who explored several questions including whether the 'vulnerability' framing is likely to inform future policy and what the implications are for disabled peoples following the COVID-19 pandemic. They observed that there has been a shift in many countries over recent decades to position disability policy as an issue of rights and equality: the aim is social and economic participation, rather than a more paternalistic concern for care and containment. Elaborating on this, these are some of the opinions expressed by the participants:

Njah-Bassey in a personal Communication (2022), declared, "Efforts towards behaviour change begins with awareness of the undesirable behaviour. Advocacy provides the necessary information needed to inform decisions makers. So, advocacy is key to behaviour change. He also added that Social mobilization is also essential as it calls for action against the undesirable behaviour. He expressed the opinion that if any discrimination against persons with disabilities was or is still being perceived regarding any aspect of COVID-19 protocols, communication should have been utilized to change this undesirable behaviour.

Iyorza in a personal communication (2022) added that Advocacy is a communication-based intervention carried out by a more influential encoder (NGO, Rights/Pressure Groups etc) on behalf of the weaker, less privileged person(s). It is intended to solicit using one or more channels of communication. Advocacy according to him is used more to appeal or persuade policy makers, leaders etc who occupy the larger ring of the society. He emphasised that Behaviour Change communication is carried out on a more personal/face-to-face level at the family level, classroom/workshop level, peer group level etc., with the aim to convince the individual(s) on the need to change unwanted behaviour, while social mobilization is a middle-based communication approach intended to inform communities about ills of certain behaviour or to ask for compliance towards certain behaviour. With Iyorza's clarification, it is pertinent to emphasise that the application of the three communication strategies can fair better if it is an intervention process involving the different strata of the society with different influences on behaviours.

It is necessary to emphasise that during COVID-19, more media advocacy was employed; although All three (advocacy, social mobilization and behaviour change communication) have been targeted at changing behaviour. It was further emphasised that the campaign messages or appeals are embedded in the protocols.

Mensah in a personal communication (2022) observed that For the mere fact that many people still believe that COVID-19 was and is still a fraud, a whole lot of advocacy, Behaviour Change Communication (BCC) and social mobilization needs to be done at all levels.

Arising from the notion that COVID-19 presented a new normal, considering the protocols that were put in place and the fact that COVID-19 also brought about different levels of

discrimination against persons with disability. The participants were asked to describe how to utilise Advocacy, Social Mobilisation and Behaviour Change Communication to discourage discrimination against persons with disability.

In responding to the question, Inyali in a personal communication (2022) said that the first thing to do is to first identify the nature of the discrimination before designing a message to discourage the specific issue(s) of discrimination. He said, "Identifying those who discriminated against others, the nature of the discrimination and possible effects is important;"rhetorically, he asked, "did people with disabilities suffer more from COVID-19because of the presumed discrimination?"

Inyang in a personal communication (2022) averred that because COVID-19 came like an unexpected visitor, and started dealing with the elite, some persons saw it as a punishment from 'God' to their oppressors. There was need to sensitize the masses on the root causes. With Inyang's view, it means the perceived discrimination arising from the COVID-19 protocols was not only against persons with disability, but also against the elites of the society.

He cautioned, "We need to first establish that there were discriminations against people with disabilities." He further said, "Personally, I don't agree with the hypothesis."

Bassey in a personal communication (2022) advised, "First identify those who discriminate against persons with disability so you decide which approach to adopt. If those who discriminate are a majority friends, family, peers, class mates etc, Behaviour change communication will be my best bet. I will also adopt a social mobilization (making it a mix approach) for the purpose of creating awareness, so people should adopt a more receptive behaviour instead of maligning people with disability.

She equally agreed that to use either of these strategies to discourage discrimination against PWDs, the nature of existing discriminations need to be known to know what changes are required.

Inyang in a personal communication (2022) stated that the media, through constant and repeated exposure of the COVID-19 protocols helped to bring about behaviour change. Wearing of face/nose masks became fashion, and anybody without it appeared odd. Hand washing became more serious; people became cautious when interacting with others, etc.

These questions, when answered, would determine the nature of campaign and advocacy to adopt to address the issues."

Bassey (2022) said that while "discrimination" portends to be deliberate and negative; she thought ignorance and absence of considerations for the peculiarities of PWD may be what is being referred to here, not willful discrimination.

Njah-Bassey (2022) advised, "Deal with the primary issue first … advocate the need to avoid any form of discrimination against PWDs. Once this is achieved, then the secondary and in this case COVID-19, issue will be addressed."

From the discussion among the participants, it is deduced that some of the COVID-19 protocols created the gap for the perceived discrimination against persons with disability (PWD's). For instance, Inyali (2022) said, "…visually impaired individuals requiring to be physically led by assistants , I'll deploy Behaviour Change Communication by organizing workshops for these group of people to sensitize them on the need to insist that those assisting should always wash and sanitize their hands before leading them."

Inyang in a personal communication (2022) asked a rhetorical question, "How about the issue of social distance? What if their assistants are infected with the virus (COVID-19)? The PWDs would then be at the mercy of their assistants."This of course, implies that unless the issue of perceived discrimination against PWD's is handled cautiously, it could result to "reverse Discrimination" against their associates!

Bassey (2022) stated that Awareness should be created via the media about the challenges and needs of PWD, and how they could be addressed. Policy makers, social mobilization agents and BCC facilitators would then know how exactly to key in.

On what participants would do to raise awareness and get people with disabilities, as well as members of the public to change the way they communicate and interact in view of COVID 19 protocols, a visually impaired respondent, Agba (2022) said: Researching and publishing findings like this one which should help improve society." He also recommended the publicity of the Irokoba's semi-circular sitting arrangement, a key finding from his previous research, for maintaining physical distance.

Unimpaired instructor, Ewa (2022) stated: provision of/easy access to internet facilities to all individuals/PWD with the need, for easy communication for awareness. Also, re-orientate society that COVID-19 changes are the new normal, and learning situations need to be duly modified. "we need to educate or re-orientate the society that though COVID 19 has come to reshape the lifestyle of each and every one of us … If it's a classroom setting, … you need to reduce the class size"

Dada, unimpaired participant in a personal communication (2022) stated: "I would use things like peer mediation, Print media education; Social media circulation;, Advocacy through faith-based organization;, Visit groups of persons with disability through Joint National Association of Persons with Disability (JONAPWD); Networking; Translation into understandable format such as Braille, sign language, indigenous & pidgin language; Comic books or short drama in audio-visual, format, Poster, Handbill flyers"

The above responses indicate need for the employment of IEC approaches, as well as SBCC approaches.

Visually impaired participant, Olayi (2022) stated: "I would advocate that Braille literacy and sign language should not only be taught in dedicated schools.

Skills like sign language are taught in what you call ordinary schools, the same with Braille. I know a woman who learned how to write with Braille on her own by learning it through internet. And she was using ordinary biro tip to create Braille impressions on a paper … (this) can help in

reducing the difficulties persons with disabilities face in our societies and schools. This implies that people should be genuinely interested in learning the way of the PWD's.

On whether with relaxation of COVID 19 protocols in Nigeria, whether the socio-cultural changes that were occasioned by COVID 19 have disappeared or are still in use, overall impression is that the protocols have in many cases provided "justification" for discrimination, as members of the public behave as if the disability is contagious).

Visually impaired participant, Agba (2022) said: relaxation of COVID-19 protocols have left the PWD's discriminated against and is still/more so, as some people are still claiming that they are maintaining need social distance.

These protocols have rather given people who were already prone to discrimination against people with disabilities to continue using them. Those who don't want to come close to persons with disabilities, when they see you on wheel chair, instead of going to push you up, they will not do it.

Visually impaired participant, Olayi (2022) said: The relaxation has little effect: individuals still observe or disregard the precautions at will. He agrees they provide a camouflage for discrimination. "There are people who wouldn't shake hands with handicapped or disabled persons under the guise that it was prohibited … we still have people who practice it. Maybe showing their own way of discriminating."

Hearing impaired participant, Irokoba (2022) stated: the advantageous innovations should stay (hybrid learning; sitting arrangements), as progressive changes are good.

There are many things we don't know, example online classrooms and other things, now we can meet physically it does not mean we should throw away what we learned during COVID 19 period … (like the U-shape) way of sitting for the deaf students. We can continue with that because it is the best learning environment. … There is what we call progressive change and change is constant

On other suggestions participants would give individuals, the society, and policy makers to improve the quality of life and learning of people living with disabilities, considering the new normal post COVID 19, a Hearing impaired participant, Irokoba stated that the Nigerian education curriculum needs to be made accessible to sensory impaired. Regular school educational material needs to be adapted, much as special education needs should be imbedded. "There are other situations that will appear where the present primary nursery and secondary school curriculums where not well drafted or designed with handicapped children in view. We need to review it to accommodate persons with special needs … Many of these students go to lecture halls but language of discussion is not their language. They will need to create a code to translate this material into their language"

Multi-media approach to learning/instruction required: apps/software. Story books in sign language, Braille, etc.

Unimpaired participant, Ewa (2022) suggested that there should be a political will of government to facilitate conducive environments for implementation of recommendations (policies, funding, programmes) that will benefit the sensory challenged.

Unimpaired, participant Igba (2022) suggested that there should b dedicated, adapted means of transportation. Bus services, vans with ramps, etc. to facilitate independent mobility of PWD. Mechanized speakers/signers.

Visually impaired participant, Agba (2022) suggested that specialists in visual aid should encourage introduction of non-degradable Braille literature, like plastic. This would enable wiping down (with sanitizer), though the challenge may be acquisition of proper Braille machines.

In the FGD with students and working class PWD's the participants were also asked if with the relaxation of the COVID-19 protocols in Nigeria, the sociocultural changes as identified still exist. Okon (2022) who is visually challenged said, "Yes, they still exist like hand washing, with attachment with hand sanitizers, as you can see some people are here today with hand sanitizers. So it has come to stay. People are also conscious of the new normal."

Agbor (2022) who is physically challenged averred: "The aspect of social distancing that has made us go through virtual communication, has come to stay. And it has … helped a lot, … you can attend a meeting in Lagos, (while) you are in Calabar, …" In the view of Agba (2022) a visually challenged participant, "It is true that these things have come to stay but … somehow … many people did not embrace it (wearing face masks) fully … (even though it is) something you can use in protecting yourself. (Also,) even though COVID 19 is reducing in Nigeria, … they are talking about Monkey Pox which still requires social distancing." He continued:

For the visually impaired, especially those that are in school, I would suggest that instead of using the normal Braille paper to write, possible plastic-like papers should be researched and introduced so that they may use the plastic Braille paper so that in case anyone wants to even use water or sanitizer to clean the face, it will not affect the real stuff. For those who are hearing impaired, I don't know if there is any way they can make any nose mask that would be transparent and would show the lips and the tongue so that they can still look at the face and do the necessary lip-reading.

Ntino (2022), a sign language interpreter offered a solution to this; "There is the transparent one that you wear, the shield. FGD One of the other things that have come to stay is vaccine … People that are planning to travel, you see them, they go and do the vaccine …"

Research Question Five: How should scholars in Communication engage in the dissemination of the proposed new forms of communication and socio-cultural interaction among the different categories of persons with disabilities and the general public in Nigeria? To answer this research question, one of the questions posed before the participants of the Communication Scholars was, "As Communication scholars, what new forms of communication and socio-cultural strategies would you propose for interaction among different categories of persons with disabilities and the general public in Nigeria?"

Bassey (2022) in reacting to the above question stated that because of such considerations, felt part of what should be encouraged is that PWDs and their caregivers should always have hand sanitizers with them, so that it can be used as frequently as needed, and also offered to strangers willing to assist them.

She further stated that extra effort could be made to ensure that PWD get vaccinated against COVID-19, to boost their resistance to and minimize effects of the virus if contracted. This is important, she thought, because they normally may be unable to maintain social distancing in attempts to communicate or get around.

Inyali (2022) added, "Social distance is more concerned with staying indoors while physical distancing emphasis the need to stay at least, 5-6 meters away from others … So, I think the Physical Distancing is a more appropriate for this.

He continued, "To answer the question, I'll deploy both advocacy and BCC. With advocacy, I'll seek the intervention of NGOs, CSOs to carry out campaigns that would persuade policy makers to conduct free COVID-19 test and vaccination on all aides of PWDs as well as prioritize providing them with free PPE. I'll also organize workshop to sensitize PWDs to insist that their assistants must always put their PPE."

Agba (2022) suggested that For instance people can be encouraged to sanitise their hands and those of the visually impaired and still hold them by hand instead of invoking Social Distancing Clause of the COVID-19 protocols to refuse to assist them.

Inyali (2022) advised that PWDs should be encouraged to familiarize themselves with internet based forms of communication. Whether they are communicating amongst themselves or with the public, this is a form of communication would help them address some of the peculiar challenges they face as they may not necessarily need to move from one point to another to pass their message.

Agba (2022) suggested that communication education can be carried out to the effect that because communication with the deaf involves lip reading, those communicating with them can take off the nose mask temporarily during communication with them.

Bassey (2022) pointed out that for the hearing and speech impaired, she would encourage acquisition and use of face shields when social distancing cannot be maintained. Being transparent, these would minimize the obstructions to visual communication and possible contamination caused by frequently touching the face mask to put it on or remove during communication.

She also suggested that when possible, virtual communication (all e-communication as different from physical) options should be maximally explored. For the visually impaired, she suggested the use of specially designed face shields, as this would provide extra protection for close-proximity interactions without hindering/altering the words of their assistants/caregivers. Unfortunately, many visually impaired persons have pointed out the distortion of sound as one of the disadvantages of Nose masks or Face Shield. Here too, virtual communication channels should be encouraged instead of physical interactions.

Mensah (2022) emphasised the use of new media as he was of the opinion that in today's Nigeria, new media namely, social media tools can be used for some PWDs as this has become a very potent way of information dissemination" with the relaxation of COVID-19 protocols in Nigeria, do you think that the socio-cultural changes created as a result of COVID-19 pandemic for persons with disabilities still exist, warranting communication scholars' attention?

Bassey (2022) in reacting to the question, was of the opinion that despite the relaxed protocols, the convenient and health enhancing changes are being maintained, such increased use of virtual interaction. However, awareness about use of hand sanitizers should be maintained to minimise some health risk.

In the third question posed to help address Research Question Five, all the participants in the three FGD's were asked to give suggestions to individuals, the society and policy makers to improve the quality of living and learning environment of people with disabilities in the new normal.

Inyang (2022) suggested, "we should try to do things right and bear one another's burdens … Apart from vaccination, most of the COVID-19 protocols are ideal ways of daily living.

Bassey (2022) advocated that sustainable, realistic policies that facilitate daily, routine adherence to best health practices should be introduced and implemented. She believed that non-alienating concessions regarding learning, health access, and workplace requirements could be encouraged. Also, according to her, certain living aids could be made statutorily available such as android phones and protective gear.

As earlier indicated, she agreed that facilitated full vaccination can be a game changer. Using available data about PWD's, door-to-door vaccination she believed can get to PWD in all areas. In the process, additional information about requirements can be collated for attention."

A monthly fund according to her could also be considered to enable access to the Internet by way of monthly data; this is as important as providing android phones as most PWD's according to her are not financially empowered to afford such life changing facilities.

At the social level, Bassey (2022) declared that she would encourage Community Based Organisations (CSOs), Faith Based Organisations (FBOs) and Non-Governmental Organisations (NGOs) to have scheduled in faces with institutions and associations servicing PWD to get first-hand information on the challenges they face in contemporary, new normal. This according to her would provide fora for getting to understand their communication and learning needs and make arrangements to meet them. Such efforts according to Bassey (2022) could be by way of advocacy to philanthropists, donor agencies or government, or direct donations/projects. She was of the opinion that there is need to also encourage social institutions such as schools and religious organisations to frequently address ways to interact with and assist PWD when they came their way. These could be through posters, flyers, social media messages or broadcast discussions.

At the individual level, she encouraged the procurement and regular use of hand sanitizers and face shields. This is because, often PWD need to be in much closer proximity to people than individuals without disabilities. They should also familiarize themselves with alternatives to

many of the activities dependent on the assistance of others. With the presence of e-banking, e-learning, e-shopping and delivery. This is because much safe, active living can be done when trusted assistants are not available.

Hearing impaired participant, Irokoba (2022) said: awareness can be created through mass media, with closed captioning and sign language for TV, and radio programs for the visually challenged. He recommended Collaboration between governmental agencies (like Nigeria Centre for Disease Control (NCDC) and Ministry of education to ensure education information gets to where it needs to.

Unimpaired instructor, Igba (2022) said: "I would encourage Government and community to create awareness. This is pivotal. Believes The Disability Act good if implemented, as required equal treatment for all citizens, physically vulnerable or otherwise."

He also recommended that Braille literacy and sign language should be integrated into mainstream school curricular, much like learning foreign languages. This, according to him will help ease communication barriers and multiply communication channels/possibilities: "If you say "henceforth, Braille reading and writing should be introduced into the primary school curriculum", and the government implements that, it will easily go … persons who are not blind could also learn how to read and write Braille. Persons who are not deaf can also learn sign language … they also need to be communicated to like we are communicating with ourselves" (with variety of social media platforms)

Summary

This research set out to investigate "Communication Implications of Post-COVID-19 Socio-Cultural Changes for Persons with Disabilities: the Nigerian Experience and Scholarly Response" The specific objectives of the study were as follows:

i.   To find out the influence of COVID-19 Pandemic on the communication, mobility and reading styles of persons with vision loss in Nigeria and how the scholars of Communication and Special Education/Guidance and Counseling should respond.

ii. To determine the level of influence the socio-cultural changes brought about by COVID-19 pandemic on the communication and lip-reading ability of the deaf-blind persons and those with hearing loss in Nigeria, and how Communication/Special Education/Guidance and Counseling scholars should address these changes.

iii. To identify new forms of communication and interaction among members of the various categories of persons with disabilities and with other members of the Nigerian public which need to be scholarly proposed to stem the impact of COVID-19 in Nigeria.

iv. To ascertain how scholars in communication should employ communication strategies of advocacy, behaviour change communication and social mobilisation to manage the socio-cultural challenges of persons with disabilities in Nigeria brought about by COVID-19 pandemic.

v.   To find out how scholars in Communication and Special Education/Guidance and Counseling should engage in the dissemination of the proposed new forms of communication and socio-

cultural interaction among the different categories of persons with disabilities and the general public in Nigeria.

The study thus, focused on what roles scholars in the areas of Mass Communication, Special Education/Guidance and Counseling have to play to address the problems. The study was anchored on Communication Accommodation Theory developed by Howard Giles in 1971 and the Diffusion of Innovation Theory developed by Everest Rogers in 1962. Qualitative research method utilizing instrument of three different focus group discussions was employed for this study. The data generated were analysed using the explanation building technique as well as rhetorical narrative to provide the basis of interpreting qualitative data gathered for the study.

Findings indicate the following:

1. The application of COVID-19 protocols affected the socio-cultural life of the PWD's in general and learning environment In particular.
2. The study found that the use of Nose Masks affected sound and voice recognition for the visually impaired.
3. The use of Nose Masks affected lip-reading for the Hearing Impaired.
4. The study revealed that COVID-19 protocols of physical/social distance created the fertile ground for discrimination of varying degrees against PWD's.
5. It was found that proper application of Advocacy, Social Mobilisation and Behaviour Change Communication can address the challenges of communication, socio-cultural changes for PWD's occasioned by COVID-19 pandemic.
6. Of the lives of vulnerable persons, they may fail to achieve their importance among some segment of the population, namely, persons with disabilities.

Conclusion

Arising from the findings of this study, it can be concluded that although the designing and enforcement/implementation of COVID-19 protocols were intended to protect all segments of the world population, some aspects of the protocols were either harmful or detrimental to persons with disabilities. Arising from this problem, it can be concluded that it created the opportunity for direct and indirect discrimination against persons with disabilities.

It can further be concluded that unless future similar protocols take into consideration, the peculiar nature of the life styles of PWD's, they might end up being harmful to them.

Recommendations

Based on the findings of this study and the conclusion reached, the following recommendations are made:

1. At any time of health emergency like COVID-19, there should be differential procedures in the application of some of the protocols.
2. There is need for special face-shield to address the special need of the PWD's.
3. The development of plastic Braille papers for easy sanitizing should be considered.

4. Positive aspects of COVID-19 protocols like hand sanitizing, semi-circular sitting arrangement found to be beneficial to the hearing impaired and virtual means of communication and interactions should be retained and promoted.

5. The integration of Sign Language Education, Braille literacy should be introduced to general curricula for all levels of education in Nigeria to enhance communication with persons with disabilities.

6. Advocacy, social mobilisation and behaviour change communication strategies should be adopted to stem discrimination against PWD's.

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